UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 3



U.S. EPA REGION 3 HEARING CLERK

IN THE MATTER OF:

DuPont Spruance Plant in Richmond, Virginia

CERCLA Docket No. CERCLA-03-2026-0031DC

DuPont Specialty Products USA, LLC

Respondent

Proceeding Under Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

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I. JURISDICTION AND GENERAL PROVISIONS

- 1. This Administrative Settlement Agreement and Order on Consent ("Settlement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and DuPont Specialty Products USA, LLC ("DuPont" or "Respondent"). This Settlement provides for the performance of a Remedial Investigation and Feasibility Study ("RI/FS") by Respondent and the payment by Respondent of certain response costs incurred by the United States, at or in connection with the DuPont Spruance Plant at 5401 Jefferson Davis Highway, Richmond, Virginia and any area where the Waste Material from Respondent's activities at this location has come to be located ("Site").
- 2. This Settlement is issued under the authority vested in the President of the United States by sections 104, 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2923 (Jan. 29, 1987), and further delegated to Regional Administrators by EPA Delegation Nos. 14-14C (Administrative Actions through Consent Orders, Jan. 18, 2017) and 14-14D (Cost Recovery Non-Judicial Agreements and Administrative Consent Orders, Jan. 18, 2017). These authorities were further redelegated by the Regional Administrator of EPA Region 3 to the Region 3 Director of the Superfund and Emergency Management Division by EPA Region 3 Delegations 14-14-C and 14-14-D, on April 15, 2019.
- 3. In entering into this Settlement Agreement, the objectives of EPA and Respondent are to provide for an RI/FS at the Site that (i) investigates the nature and extent of contamination and the threats, if any, to public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at or from the Site, (ii) evaluates remedial alternatives to prevent, mitigate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants or contaminants at or from the Site; and (iii) complements, but does not duplicate, Respondent's obligations under its Resource and Conservation Recovery Action ("RCRA") Corrective Action Permit issued by the Commonwealth of Virginia ("Commonwealth").
- 4. EPA and Respondent recognize that this Settlement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement do not constitute an admission of any liability. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement, the validity of the findings of facts, conclusions of law, and determinations in Sections IV (Findings of Fact) and V (Conclusions of Law and Determinations) of this Settlement. Respondent agrees not to contest the basis or validity of this Settlement or its terms.

II. PARTIES BOUND

5. This Settlement is binding upon EPA and upon Respondent and its successors. Unless EPA otherwise consents, (a) any change in ownership or corporate or other legal status of Respondent, including any transfer of assets, or (b) any Transfer of the Site or any portion thereof, does not alter any of Respondent's obligations under this Settlement. Respondent's

responsibilities under this Settlement cannot be assigned except under a modification executed in accordance with \P 91.

6. Respondent shall be responsible for ensuring that its officers, directors, employees, agents, contractors, or any other person representing Respondent perform the Work in accordance with the terms of this Settlement. Respondent shall provide notice of this Settlement to each person representing Respondent with respect to the Site or the Work. Respondent shall provide notice of this Settlement to each contractor performing any Work and shall ensure that notice of the Settlement is provided to each subcontractor performing any Work.

III. DEFINITIONS

7. Subject to the next sentence, terms used in this Settlement that are defined in CERCLA or the regulations promulgated under CERCLA have the meanings assigned to them in CERCLA and the regulations promulgated under CERCLA. Whenever the terms set forth below are used in this Settlement, the following definitions apply:

"CERCLA" means the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675.

"Commonwealth" means the Commonwealth of Virginia.

"Day" or "day" means a calendar day. In computing any period under this Settlement, the day of the event that triggers the period is not counted and, where the last day is not a working day, the period runs until the close of business of the next working day. "Working Day" means any day other than a Saturday, Sunday, or federal or State holiday.

"Effective Date" means the effective date of this Settlement as provided in Section XXV.

"EPA" means the United States Environmental Protection Agency.

"Fund" means the Hazardous Substance Superfund established under section 9507 of the Internal Revenue Code, 26 I.R.C. § 9507.

"Future Response Costs" means all costs (including direct, indirect, payroll, contractor, travel, and laboratory costs) that the United States pays after the Effective Date in implementing, overseeing, or enforcing this Settlement, including: (i) in developing, reviewing and approving deliverables generated under this Settlement; (ii) in overseeing Respondent's performance of the Work; (iii) in assisting or taking action to obtain access or use restrictions under ¶ 39; (iv) in taking action under ¶ 46 (Access to Financial Assurance); (v) in taking response action described because of Respondent's failure to take emergency action under Section 6.6 (Emergency Response and Reporting) in the Statement of Work ("SOW"); (vi) in implementing a Work Takeover under ¶ 38; (vii) in implementing community involvement activities including the cost of any technical assistance grant provided under section 117(e) of CERCLA and (viii) in

enforcing this Settlement, including all costs paid under Section XIV (Dispute Resolution) and all litigation costs.

"Including" or "including" means "including but not limited to."

"Interest" means interest at the rate specified for interest on investments of the Fund, as provided under section 107(a) of CERCLA, compounded annually on October 1 of each year. The applicable rate of interest will be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year. As of the date EPA signs this Settlement, rates are available online at https://www.epa.gov/superfund/superfund-interest-rates.

"National Contingency Plan" or "NCP" means the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to section 105 of CERCLA, codified at 40 C.F.R. part 300, and any amendments thereto.

"Paragraph" or "¶" means a portion of this Settlement identified by an Arabic numeral or an upper- or lower-case letter.

"Parties" means EPA and Respondent.

"RCRA" means the Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992k (also known as the Resource Conservation and Recovery Act).

"RI/FS" means the Remedial Investigation and Feasibility Study required under this Settlement.

"Respondent" means DuPont Specialty Products USA, LLC.

"Section" means a portion of this Settlement identified by a Roman numeral.

"Settlement" means this Administrative Settlement Agreement and Order on Consent, all appendixes attached hereto (listed in Section XXI), and all deliverables approved under and incorporated into this Settlement. If there is a conflict between a provision in Sections I through XXV and a provision in any appendix or deliverable, the provision in Sections I through XXV controls.

"Site" means the DuPont Spruance Plant, comprising approximately 525 acres, located at located at 5401 Jefferson Davis Highway, Richmond, Virginia and depicted generally on the map attached as Appendix A.

"Special Account" means the special account, within the Fund, established for the Site by EPA under section 122(b)(3) of CERCLA.

"Statement of Work" or "SOW" means the document attached to this Settlement as Appendix B which describes the activities Respondent shall perform to conduct the RI/FS, and any modifications made thereto in accordance with this Settlement.

"Transfer" means to sell, assign, convey, lease, mortgage, or grant a security interest in, or where used as a noun, a sale, assignment, conveyance, or other disposition of any interest by operation of law or otherwise.

"United States" means the United States of America and each department, agency, and instrumentality of the United States, including EPA.

"Waste Material" means (a) any "hazardous substance" under section 101(14) of CERCLA; (b) any pollutant or contaminant under section 101(33) of CERCLA; (c) any "solid waste" under section 1004(27) of RCRA; and (d) any "hazardous material," "hazardous substance," "hazardous waste," or "solid waste" under Va. Code § 10.1-1400.

"Work" means all obligations of Respondent under Sections VII (Performance of the Work) through X (Indemnification and Insurance).

"Work Takeover" means EPA's assumption of the performance of any of the Work in accordance with ¶ 38.

IV. FINDINGS OF FACT

Based on available information and investigation, EPA finds the following facts, which Respondent does not admit:

- 8. Respondent DuPont Specialty Products USA, LLC ("DuPont"), owns and/or operates the DuPont Spruance Plant located at 5401 Jefferson Davis Highway, Richmond, Chesterfield County, Virginia ("Facility").
- 9. E.I. du Pont de Nemours and Company ("EID"), owned and operated the Facility from 1927 until it transferred ownership to DuPont in 2019.
- 10. The Facility is located south of downtown Richmond and covers approximately 525 acres. Jefferson Davis Highway ("U.S. Route 1") borders the Facility to the west, and Interstate-95 and the James River border the Facility to the east. Other industrial properties are located to the north and south of the Facility; beyond this, residential properties are generally located in all directions within 1 mile, in addition to farmland to the east.
- 11. Numerous surface water bodies are located on and around the Site. Surface water on most of the Site is drained by ditches and streams that flow to the James River, which borders the Site to the east. The James River is classified by the Commonwealth as a public water supply and as a recreational water body.
- 12. The Site geology can be divided into two distinct units: (1) the top or shallowest unit is composed of alluvial sediments (i.e., sands, silts, and clays); and (2) the bedrock unit is below the alluvium. Overall, groundwater at the Site generally flows northeast and southeast towards the James River; the shallow aquifer discharges to the James River. Some groundwater

from the Site also reaches the James River by discharging to the west to Grindall Creek and to the east to the East Ditch and the Site's internal drainage ways, including the Outfall Ditch.

- 13. EID began construction of the Facility in 1927. Construction was completed in 1929 and initial operations included the production of rayon and cellophane. During World War II, the Facility produced supplies such as cellophane paper, cellophane, and rayon yarn. In the 1950s and 1960s, the Facility halted production of rayon and commenced production of other materials such as Tyvek® and polytetrafluoroethylene ("PTFE") fiber. Between the 1920s and the present the Facility manufactured nylon, rayon, Kevlar®, Nomex®, Mylar®, PTFE fiber, Tyvek®, and Zytel®.
- 14. The Facility's current manufacturing processes and areas include the following: 1) Nomex® Processing Area; 2) Kevlar® Processing Area; 3) Kevlar® Solvent Recovery Area; 4) Tyvek® Processing Area; 5) Zytel® Processing Area; 6) Gypsum Production Area; 7) Nylon Production Area; and 8) and Mylar® Production Area. The Zytel® and Mylar® Production operating areas are currently operated by Celanese.
- 15. The Facility is subject to a Title V air permit, certain Toxic Substances Control Act ("TSCA") requirements, a Virginia Pollutant Discharge Elimination System Permit, and RCRA permit for storage, treatment, and corrective action of hazardous waste.
- 16. The Facility is subject to the RCRA Corrective Action Program for which the Commonwealth has been authorized under Section 3006 of RCRA. A groundwater extraction and treatment system ("GWTS") was installed on the Facility in 1994 to control the migration of three primary constituents of concern ("COCs"): hexamethylphosphoramide ("HMPA"), trichlorofluoromethane ("TCFM"), and chloroform. Additional constituents of potential concern ("COPCs") identified are carbon tetrachloride, tetrachloroethylene, trichloroethylene, vinyl chloride, carbon disulfide, and perfluorooctanoic acid ("PFOA"). According to Respondent, the GWTS was subsequently modified in 2018 to include additional site perimeter collection wells to capture more groundwater and a solids removal step in the process to more efficiently remove COCs.
- 17. On July 2, 2012, the Virginia Department of Environmental Quality ("VADEQ") selected the final remedy for the Facility in a Statement of Basis ("SB"), which includes "source control through improving the existing [GWTS] as well as maintaining existing capping of soils with concentrations of contaminants above remedial goals, . . . continue long term groundwater and surface water monitoring . . . to ensure clean up goals are met, . . . [and] require institutional and engineering controls be implemented as necessary to prevent current and potential future exposure to contamination."
- 18. On October 15, 2014, DuPont filed a UECA Environmental Covenant with the Chesterfield Circuit Court, in accordance with the SB, to prevent current and potential future exposure to contamination.
- 19. Beginning in 1953, EID operated a PTFE fibers production unit at the Facility. The fiber was produced through a spinning process that used a PTFE dispersion product

(received from off-Site as a raw material) with residual PFOA, a surfactant used to prevent agglomeration of the particles. EID sold its PTFE fiber business to Toray Industries, Inc., effective October 30, 2002, but continued to produce PTFE fibers for Toray Industries, Inc. at the Facility under a tolling agreement until March 29, 2004.

- 20. The PTFE dispersion that contained PFOA was shipped to the Facility in drums prior to being changed to totes. Historically, the empty drums were disposed in the "Site Landfill, North." Wastewater associated with the use of dispersions containing PFOA was discharged to the Facility's wastewater treatment plant ("WWTP").
- 21. PFOA was used at the Facility between 1953 and 2004, and as a result of Facility operations, has been released to the environment both on- and off-Site. PFOA has been detected in soil, groundwater, wastewater, stormwater, and surface water at and in the vicinity of the Facility.
- 22. As part of the operation, PTFE waste, which contained PFOA, was disposed in the Site Landfill, North. The landfill received waste from the 1920s until 1978. This landfill is a source of groundwater contamination; PFOA has been detected in the vicinity of the Facility groundwater downgradient (east-northeast) of the landfill.
- 23. The Outfall Ditch or Former Untreated Wastewater Discharge Channel ("SWMU 14") is the current discharge channel for stormwater, noncontact cooling water, and Polishing Pond effluent. This channel originates at the outfall of the stormwater collection system on the west side of the manufacturing area and terminates where it discharges into the James River.
- 24. The Facility has eight stormwater outfalls that discharge to Grindall Creek. During precipitation events, runoff from surfaces or runoff or erosion of PFOA-containing soil is discharged to Grindall Creek. Stormwater sampling from 2019 detected PFOA at concentrations ranging from 0.006 micrograms per liter (" μ g/L") to 0.28 μ g/L.
- 25. PFOA was detected in all twelve Facility monitoring wells from 2013 to 2022, at concentrations ranging from 0.0061 μ g/L to a maximum of 6.7 μ g/L. All of these PFOA concentrations exceed the applicable Maximum Contaminant Level ("federal MCL") of 0.004 μ g/L promulgated at 40 C.F.R. Part 141 pursuant to Section 1412 of the Safe Drinking Water Act, 42 U.S.C. Section 300g-1, and the EPA Drinking Water Health Advisory ("HA") of 0.000004 μ g/L.
- 26. PFOA was detected in all fifteen monitoring wells in the vicinity of the Facility from 2013-2022 at concentrations ranging from 0.0061 μ g/L to a maximum of 19 μ g/L. All of these PFOA concentrations exceed the federal MCL of 0.004 μ g/L and the EPA HA of 0.000004 μ g/L.
- 27. VOCs have been detected in 30 groundwater monitoring wells. Groundwater data from 2023 measured the following COCs that exceed groundwater standards: Chloroform 49 ug/L (Regional Screening Level ("RSL") 0.2 ug/l), Tetrachloroethylene 62.2 ug/l (MCL 5.0

- ug/l), HMPA 3,550 ug/l (RSL 8.0 ug/l), Vinyl chloride 8.37 ug/l (MCL 2.0 ug/l), TCFM 10,900 ug/l (RSL 500 ug/l).
- 28. PFOA has been detected in four soil samples collected at the Site at concentrations ranging from 0.043 μ g/kg to 150 μ g/kg. The PFOA concentrations in two samples (3.3 and 150 μ g/kg) exceed the EPA soil screening level of 0.91 μ g/kg.
- 29. Concentrations of PFOA were found in the James River, Grindall Creek, and Falling Creek below 0.025 μ g/L; springs on the eastern side of the Facility below 6.2 μ g/L; in 16 groundwater monitoring wells at 1 μ g/L or less; and 11 groundwater monitoring wells between 1 μ g/L and 25 μ g/L.
- 30. Several surface water/spring locations at the Site, near the James River have been sampled for PFOA from 2008-2012 ranging in concentrations from 0.16 μ g/L 5.4 μ g/L. These springs appear to be groundwater that seeps from sand units in the James River levee deposits. Groundwater at these features tends to seep out and flow gently toward the James River.
- 31. Demolition activities were conducted in the former PTFE operating area at the Facility in 2020 and 2021. Ten waste characterization samples collected from various building surfaces were analyzed for PFOA. PFOA was detected in all samples collected at concentrations ranging from $7.7 \mu g/kg$ to $5,900 \mu g/kg$.
- 32. In a 2022 EPA inspection, PFOA and PFOS were found at the facility's East Ditch at a concentration of 345 ng/l and11.4 ng/l, respectively. The same inspection detected PFOA at 850 ng/l and PFOS at 11 ng/l in the influent of the facility's groundwater treatment system.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

- 33. Based on the Findings of Fact in Section IV, EPA has determined that:
 - a. The Site is a "facility" as defined by section 101(9) of CERCLA.
- b. The contamination found at the Site, as identified in the Findings of Fact above, includes "hazardous substances" as defined by section 101(14) of CERCLA, and "pollutants or contaminants" as defined by section 101(33) of CERCLA.
 - c. Respondent is a "person" as defined by section 101(21) of CERCLA.
 - d. Respondent is a responsible party under section 107(a) of CERCLA.
 - (1) Respondent is the "owner" and/or "operator" of the Facility, as defined by section 101(20) of CERCLA and within the meaning of section 107(a)(1) of CERCLA.

- e. The conditions described in ¶¶ 24 through 32 of the Findings of Fact constitute an actual and/or threatened "release" of a hazardous substance from the Facility as defined by section 101(22) of CERCLA.
- f. The actions required by this Settlement are necessary to protect the public health or welfare or the environment, are in the public interest, are consistent with CERCLA and the NCP, and will expedite effective remedial action and minimize litigation, in accordance with sections 104(a)(1) and 122(a) of CERCLA.
- g. EPA has determined that Respondent is qualified to conduct the RI/FS within the meaning of section 104(a) of CERCLA and will carry out the Work properly and promptly, in accordance with sections 104(a) and 122(a) of CERCLA if Respondent complies with the terms of this Settlement.

VI. ORDER AND AGREEMENT

34. Based upon the Findings of Fact and Conclusions of Law and Determinations set forth above, it is hereby Ordered and Agreed that Respondent shall comply with all provisions of this Settlement.

VII. PERFORMANCE OF THE WORK

- 35. **Performance of Work in Accordance with SOW**. Respondent shall develop and perform the RI/FS in accordance with the SOW and all EPA-approved, conditionally approved, or modified deliverables as required by the SOW. All deliverables required to be submitted for approval under the Settlement or SOW shall be subject to approval by EPA in accordance with Section 7.5 (Approval of Deliverables) of the SOW.
- 36. **Modifications to the Work**. EPA may modify the Work under this Settlement if it determines that additional data are needed or that, in addition to tasks defined in the initially approved Work Plan, other additional work may be necessary to accomplish the objectives of the RI/FS. Respondent also may request modification of the approved Work Plan or other deliverables. EPA may notify Respondent of any modification needed under the foregoing two sentences. Respondent shall, within 30 days thereafter, submit a revised work plan and other deliverables as necessary to EPA for approval. Respondent shall implement the revised work plan and any other deliverables upon EPA's approval in accordance with the procedures of Section 7.5 (Approval of Deliverables) of the SOW.
- 37. **Compliance with Applicable Law.** Nothing in this Settlement affects Respondent's obligations to comply with all applicable federal and state laws and regulations. The activities conducted in accordance with this Settlement, if approved by EPA, will be deemed to be consistent with the NCP as provided under section 300.700(c)(3)(ii).

38. Work Takeover

- a. If EPA determines that Respondent: (1) has ceased to perform any portion of the Work; (2) is seriously or repeatedly deficient or late in performing the Work; or (3) is performing the Work in a manner that may cause an endangerment to public health or welfare or the environment, EPA may issue a notice of Work Takeover to Respondent, including a description of the grounds for the notice and a period of time ("Remedy Period") within which Respondent shall remedy the circumstances giving rise to the notice. The Remedy Period will be 20 days, unless EPA determines in its unreviewable discretion that there may be an endangerment, in which case the Remedy Period will be 10 days.
- b. If, by the end of the Remedy Period, Respondent does not remedy to EPA's satisfaction the circumstances giving rise to the notice of Work Takeover, EPA may notify Respondent and, as it deems necessary, commence a Work Takeover.
- c. EPA may conduct the Work Takeover during the pendency of any dispute under Section XIV but shall terminate the Work Takeover if and when: (1) Respondent remedies, to EPA's satisfaction, the circumstances giving rise to the notice of Work Takeover; or (2) upon the issuance of a final determination under Section XIV that EPA is required to terminate the Work Takeover.

VIII. PROPERTY REQUIREMENTS

- 39. If the Site, or any other property where access is needed to implement this Settlement, is owned or controlled by Respondent, Respondent shall, commencing on the Effective Date, provide EPA and its representatives, including contractors, with access at all reasonable times to the Site, or such other property, for the purpose of conducting any activity related to this Settlement. Respondent shall refrain from using the Site in any manner that EPA, in consultation with VADEQ, determines will pose an unacceptable risk to public health or welfare or the environment because of exposure to Waste Material, or will interfere with or adversely affect the implementation or integrity of the Work. Where any action under this Settlement is to be performed in areas owned or controlled by someone other than Respondent, Respondent shall use best efforts to obtain all necessary agreements for access, enforceable by Respondent and EPA, within 30 days after the Effective Date, or as otherwise specified in writing by EPA's Project Coordinator. Respondent shall provide a copy of each agreement required under this ¶ 39 to EPA and the Commonwealth.
- a. As used in this Section, "Affected Property" means any real property, including the Site, where EPA determines, at any time, that access; land, water, or other resource use restrictions; or any combination thereof, are needed to implement the RI.
- b. Land, Water, or Other Resource Use Restrictions. The following is a list of land, water, or other resource use restrictions applicable:

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- (1) Consult with EPA and VADEQ to ensure that any new structures or wells on the Affected Property will not be constructed or used in a way which could interfere with the RI/FS.
- (2) Consult with EPA and VADEQ to ensure that the Affected Property will not be used in a way that will adversely affect or interfere with the RI/FS.
- (3) Groundwater at the Facility is limited by the Commonwealth to industrial use and should not be used for any purpose other than industrial use unless agreed to by EPA, in consultation with VADEQ.
- 40. As used in this Section, "best efforts" means the efforts that a reasonable person in the position of Respondent would use to achieve the goal in a timely manner, including the cost of employing professional assistance and the payment of reasonable sums of money to secure access and/or use restriction agreements, as required by this Section. If Respondent cannot accomplish what is required through "best efforts" in a timely manner, they shall notify EPA, and include a description of the steps taken to achieve the requirements. If EPA deems it appropriate, it may assist Respondent, or take independent action, in obtaining such access and/or use restrictions.
- 41. Respondent shall, prior to entering into a contract to Transfer any of its property that is part of the Site, or 60 days prior to a Transfer of such property, whichever is earlier, (a) give written notice to the proposed transferee that the property is subject to this Settlement; and (b) give written notice to EPA of the proposed Transfer, including the name and address of the transferee. Any Respondent who owns or controls property at the Site also agrees to require that their successors comply with this Section and Section XIX (Records).
- 42. Notwithstanding any provision of the Settlement, EPA retains all of its access authorities and rights, as well as all of its rights to require land, water, or other resource use restrictions, including enforcement authorities related thereto under CERCLA, RCRA, and any other applicable statute or regulations.

IX. FINANCIAL ASSURANCE

43. To ensure completion of the Work required under Section VII, Respondent shall secure financial assurance, initially in the amount of \$1,846,144 ("Estimated Cost of the Work"), for the benefit of EPA. The financial assurance must be one or more of the mechanisms listed below, in a form substantially identical to the relevant sample documents available from EPA, and be satisfactory to EPA. As of the date of signing this Settlement, the sample documents can be found under the "Financial Assurance - Settlements" category on the Cleanup Enforcement Model Language and Sample Documents Database at https://cfpub.epa.gov/compliance/models/. Respondent may use multiple mechanisms if they are limited to surety bonds guaranteeing payment, letters of credit, trust funds, or some combination thereof. The following are acceptable mechanisms:

- a. A surety bond guaranteeing payment, performance of the Work, or both, that is issued by a surety company among those listed as acceptable sureties on federal bonds as set forth in Circular 570 of the U.S. Department of the Treasury;
- b. An irrevocable letter of credit, payable to EPA or at the direction of EPA, that is issued by an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or state agency;
- c. A trust fund established for the benefit of EPA that is administered by a trustee that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.
- 44. Respondent shall, within 30 days after the Effective Date, seek EPA's approval of the form of Respondent's financial assurance. Within 30 days after the Effective Date, Respondent shall secure all executed and/or otherwise finalized mechanisms or other documents consistent with the EPA-approved form of financial assurance and shall submit such mechanisms and documents to the Regional Financial Management Officer in accordance with ¶ 89.
- 45. Respondent shall diligently monitor the adequacy of the financial assurance. If Respondent becomes aware of any information indicating that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, Respondent shall notify EPA of such information within 7 days. If EPA determines that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, EPA will notify Respondent of such determination. Respondent shall, within 30 days after notifying EPA or receiving notice from EPA under this Paragraph, secure and submit to EPA for approval a proposal for a revised or alternative financial assurance mechanism that satisfies the requirements of this Section. EPA may extend this deadline for such time as is reasonably necessary for Respondent, in the exercise of due diligence, to secure and submit to EPA a proposal for a revised or alternative financial assurance mechanism, not to exceed 60 days. Respondent shall follow the procedures of ¶ 47 (Modification of Amount, Form, or Terms of Financial Assurance) in seeking approval of, and submitting documentation for, the revised or alternative financial assurance mechanism. Respondent's inability to secure financial assurance in accordance with this Section does not excuse performance of any other obligation under this Settlement.

46. Access to Financial Assurance

- a. If EPA issues a notice of a Work Takeover under ¶ 38.b, then, in accordance with any applicable financial assurance mechanism, EPA may require: (1) the performance of the Work; and/or (2) that any funds guaranteed be paid in accordance with ¶ 46.d.
- b. If EPA is notified that the issuer of a financial assurance mechanism intends to cancel the mechanism, and Respondent fails to provide an alternative financial assurance mechanism in accordance with this Section at least 30 days prior to the cancellation

date, the funds guaranteed under such mechanism must be paid prior to cancellation in accordance with ¶ 46.d.

- c. If, upon issuance of a notice of a Work Takeover under ¶ 38, EPA is unable for any reason to promptly secure the resources guaranteed under any applicable financial assurance mechanism, whether in cash or in kind, to continue and complete the Work, then EPA is entitled to demand an amount, as determined by EPA, sufficient to cover the cost of the remaining Work to be performed. Respondent shall, within 30 days of such demand, pay the amount demanded as directed by EPA.
- d. Any amounts required to be paid under this ¶ 46 will be, as directed by EPA: (i) paid to EPA in order to facilitate the completion of the Work by EPA, the Commonwealth, or by another person; or (ii) deposited into an interest-bearing account, established at a duly chartered bank or trust company that is insured by the Federal Deposit Insurance Corporation ("FDIC"), in order to facilitate the completion of the Work by another person. If payment is made to EPA, EPA may deposit the payment into the Fund or into the DuPont Spruance Special Account to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the Fund.
- 47. **Modification of Amount, Form, or Terms of Financial Assurance**. Beginning after the first anniversary of the Effective Date or at any other time agreed to by the Parties, Respondent may request to change the form, terms, or amount of the financial assurance mechanism. Respondent shall submit any request to EPA in accordance with ¶ 44, and shall include an estimate of the cost of the remaining Work, an explanation of the bases for the cost calculation, and a description of the proposed changes, if any, to the form or terms of the financial assurance. EPA will notify Respondent of its decision regarding the request. Respondent may modify the form, terms, or the amount of the financial assurance mechanism only in accordance with: (a) EPA's approval; or (b) any resolution of a dispute on the appropriate amount of financial assurance under Section XIV. Any decision made by EPA on a request submitted under this Paragraph to change the form or terms of a financial assurance mechanism shall not be subject to challenge by Respondent pursuant to the dispute resolution provisions of this Settlement or in any other forum. Respondent shall submit to EPA, within 30 days after receipt of EPA's approval, or consistent with the terms of the resolution of the dispute, documentation of the change to the form, terms, or amount of the financial assurance instrument.
- 48. **Release, Cancellation, or Discontinuation of Financial Assurance**. Respondent may release, cancel, or discontinue any financial assurance provided under this Section only: (a) if EPA issues a Notice of Completion of Work under Section 7.7 of the SOW (Notice of Completion of RI/FS Work); (b) in accordance with EPA's approval of such release, cancellation, or discontinuation; or (c) if there is a dispute regarding the release, cancellation, or discontinuance of any financial assurance, in accordance with the agreement or final decision resolving such dispute under Section XIV.

X. INDEMNIFICATION AND INSURANCE

49. Indemnification

- EPA does not assume any liability by entering into this Settlement or by virtue of any designation of Respondent as EPA's authorized representative under section 104(e)(1) of CERCLA. Respondent shall indemnify and save and hold harmless EPA and its officials, agents, employees, contractors, subcontractors, and representatives for or from any claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondent, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on Respondent's behalf or under their control, in carrying out activities under this Settlement, including any claims arising from any designation of Respondent as EPA's authorized representatives under section 104(e)(1) of CERCLA. Further, Respondent agrees to pay EPA all costs it incurs including attorneys' fees and other expenses of litigation and settlement arising from, or on account of, claims made against EPA based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on its behalf or under its control in carrying out activities under this Settlement. EPA may not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities under this Settlement. Respondent and any such contractor may not be considered an agent of EPA.
- b. EPA may give Respondent notice of any claim for which EPA plans to seek indemnification in accordance with this ¶ 49, and shall consult with Respondent prior to settling such claim.
- 50. Respondent covenants not to sue and shall not assert any claim against EPA for damages or reimbursement or for set-off of any payments made or to be made to EPA, arising from or on account of any contract, agreement, or arrangement between any one or more of Respondent and any person for performance of Work or other activities on or relating to the Site, including claims on account of construction delays. In addition, Respondent shall indemnify and save and hold EPA harmless with respect to any claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of work at or relating to the Site, including claims on account of construction delays.
- 51. **Insurance**. Respondent shall secure, by no later than 15 days before commencing any on-Site Work, the following insurance: (a) commercial general liability insurance with limits of liability of \$1 million per occurrence; (b) automobile liability insurance with limits of liability of \$1 million per accident; and (c) umbrella liability insurance with limits of liability of \$5 million in excess of the required commercial general liability and automobile liability limits. The insurance policy must name EPA as an additional insured with respect to all liability arising out of the activities performed by or on behalf of Respondent under this Settlement. Respondent shall maintain this insurance until the first anniversary after EPA's issuance of the Notice of Completion of RI/FS Work under Section 7.7 of the SOW. In addition, for the duration of this Settlement, Respondent shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation

insurance for all persons performing the Work on behalf of Respondent in furtherance of this Settlement. Prior to commencement of the Work, Respondent shall provide to EPA certificates of such insurance and a copy of each insurance policy. Respondent shall resubmit such certificates and copies of policies each year on the anniversary of the Effective Date. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then, with respect to that contractor or subcontractor, Respondent need provide only that portion of the insurance described above that is not maintained by the contractor or subcontractor. Respondent shall ensure that all submittals to EPA under this Paragraph identify the DuPont Spruance Site, Richmond, VA and the EPA docket number of this case.

XI. PAYMENTS FOR RESPONSE COSTS

52. Payments by Respondent for Future Response Costs

- **Periodic Bills.** On a periodic basis, EPA will send Respondent a bill for Future Response Costs, including an "e-Recovery Report" or other standard cost summary listing direct costs paid by EPA, its contractors, and subcontractors and related indirect costs. Respondent may initiate a dispute under Section XIV regarding a Future Response Cost billing, but only if the dispute relates to one or more of the following issues: (1) whether EPA has made an arithmetical error; (2) whether EPA has included a cost item that is not within the definition of Future Response Costs; or (3) whether EPA has paid excess costs as a direct result of an EPA action that was inconsistent with a specific provision or provisions of the NCP. If Respondent submits a Notice of Dispute, Respondent shall within the 30-day period, also as a requirement for initiating the dispute, (a) pay all uncontested Future Response Costs to EPA in the manner described in ¶ 52.b, and (b) establish, in a duly chartered bank or trust company, an interestbearing escrow account that is insured by the FDIC and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XIV shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to reimburse EPA for its Future Response Costs. Respondent shall specify in the Notice of Dispute the contested costs and the basis for the objection.
- b. **Payment of Bill**. Respondent shall pay the bill, or if it initiates dispute resolution, the uncontested portion of the bill, if any, within 30 days after receipt of the bill. Respondent shall pay the contested portion of the bill determined to be owed, if any, within 30 days after the determination regarding the dispute. Each payment for: (1) the uncontested bill or portion of bill, if late, and; (2) the contested portion of the bill determined to be owed, if any, must include an additional amount for Interest accrued from the date of receipt of the bill through the date of payment. Respondent shall make payment at https://www.pay.gov using the "EPA Miscellaneous Payments Cincinnati Finance Center" link, and including references to the Site/Spill ID number listed in ¶ 89 and the purpose of the payment. Respondent shall send notice of this payment to EPA.

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53. **Deposit of Payments**. EPA may, in its unreviewable discretion, deposit the amounts paid under ¶ 52 in the Fund, in the Special Account, or both. EPA may, in its unreviewable discretion, retain and use any amounts deposited in the Special Account to conduct or finance response actions at or in connection with the Site, or transfer those amounts to the Fund.

XII. NATURAL RESOURCE DAMAGES

54. For the purposes of Section 113(g)(1) of CERCLA, the Parties agree that, upon issuance of this Order for performance of an RI/FS at the Site, remedial action under CERCLA shall be deemed to be scheduled and an action for damages (as defined in 42 U.S.C. § 9601(6)) must be commenced within 3 years after the completion of the remedial action.

XIII. FORCE MAJEURE

- 55. "Force majeure," for purposes of this Settlement, means any event arising from causes beyond the control of Respondent, of any entity controlled by Respondent, or of Respondent's contractors that delays or prevents the performance of any obligation under this Settlement despite Respondent's best efforts to fulfill the obligation. Given the need to protect public health and welfare and the environment, the requirement that Respondent exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure and best efforts to address the effects of any potential force majeure (a) as it is occurring and (b) following the potential force majeure such that the delay and any adverse effects of the delay are minimized to the greatest extent possible. "Force majeure" does not include financial inability to complete the Work or increased cost of performance.
- 56. If any event occurs for which Respondent will or may claim a force majeure, Respondent shall notify EPA's Project Coordinator by email. The deadline for the initial notice is 2 days after the date Respondent first knew or should have known that the event would likely delay performance. Respondent shall be deemed to know of any circumstance of which any contractor of, subcontractor of, or entity controlled by Respondent knew or should have known. Within 5 days thereafter, Respondent shall send a further notice to EPA that includes: (i) a description of the event and its effect on Respondent's completion of the requirements of the Settlement; (ii) a description of all actions taken or to be taken to prevent or minimize the adverse effects or delay; (iii) the proposed extension of time for Respondent to complete the requirements of the Settlement; (iv) a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health or welfare or the environment; and (v) all available proof supporting their claim of force majeure. Failure to comply with the notice requirements herein regarding an event precludes Respondent from asserting any claim of force majeure regarding that event, provided, however, that if EPA, despite late or incomplete notice, is able to assess to its satisfaction whether the event is a force majeure under ¶ 55 and whether Respondent has exercised its best efforts under ¶ 55, EPA may, in its unreviewable discretion, excuse in writing Respondent's failure to submit timely or complete notices under this Paragraph.

- 57. EPA will notify Respondent of its determination whether Respondent is entitled to relief under ¶ 55, and, if so, the duration of the extension of time for performance of the obligations affected by the force majeure. An extension of the time for performance of the obligations affected by the force majeure shall not, of itself, extend the time for performance of any other obligation. Respondent may initiate dispute resolution under Section XIV regarding EPA's determination within 15 days after receipt of the determination. In any such proceeding, Respondent has the burden of proving that it is entitled to relief under ¶ 55 and that the proposed extension was or will be warranted under the circumstances.
- 58. The failure by EPA to timely complete any activity under the Settlement is not a violation of the Settlement, provided, however, that if such failure prevents Respondent from timely completing a requirement of the Settlement, Respondent may seek relief under this Section.

XIV. DISPUTE RESOLUTION

- 59. Unless otherwise provided in this Settlement, Respondent shall use the dispute resolution procedures of this Section to resolve any dispute arising under this Settlement.
- 60. A dispute will be considered to have arisen when Respondent sends a written notice of dispute ("Notice of Dispute") to EPA. A notice is timely if sent within 30 days after receipt of the EPA notice or determination giving rise to the dispute or within 15 days in the case of a force majeure determination. Disputes arising under this Settlement must in the first instance be the subject of informal negotiations between the parties to the dispute. The period for informal negotiations may not exceed 20 days after the dispute arises, unless EPA otherwise agrees. If the parties cannot resolve the dispute by informal negotiations, the position advanced by EPA is binding unless Respondent initiates formal dispute resolution under ¶ 61. By agreement of the parties, mediation may be used during this informal negotiation period to assist the parties in reaching a voluntary resolution or narrowing of the matters in dispute.

61. Formal Dispute Resolution

- a. **Statement of Position**. Respondent may initiate formal dispute resolution by serving on EPA, within 20 days after the conclusion of informal dispute resolution under ¶ 60, an initial Statement of Position regarding the matter in dispute. EPA's responsive Statement of Position is due within 20 days after receipt of the initial Statement of Position. All statements of position must include supporting factual data, analysis, opinion, and other documentation. A reply, if any, is due within 14 days after receipt of the response. If appropriate, EPA may extend the deadlines for filing statements of position for up to 45 days and may allow the submission of supplemental statements of position.
- b. **Formal Decision**. The Director of the Superfund & Emergency Management Division, EPA Region 3, will issue a formal decision resolving the dispute ("Formal Decision") based on the statements of position and any replies and supplemental statements of position. The Formal Decision is binding on Respondent.

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- 62. **Escrow Account**. For disputes regarding a Future Response Cost billing, Respondent shall: (a) establish, in a duly chartered bank or trust company, an interest-bearing escrow account that is insured by the FDIC; (b) remit to that escrow account funds equal to the amount of the contested Future Response Costs; and (c) send to EPA copies of the correspondence and of the payment documentation (e.g., the check) that established and funded the escrow account, including the name of the bank, the bank account number, and a bank statement showing the initial balance in the account. EPA may, in its unreviewable discretion, waive the requirement to establish the escrow account. Respondent shall cause the escrow agent to pay the amounts due to EPA under ¶ 52, if any, by the deadline for such payment in ¶ 52. Respondent is responsible for any balance due under ¶ 52 after the payment by the escrow agent.
- 63. The initiation of dispute resolution procedures under this Section does not extend, postpone, or affect in any way any requirement of this Settlement, except as EPA agrees. Stipulated penalties with respect to the disputed matter will continue to accrue, but payment is stayed pending resolution of the dispute, as provided in ¶ 66.

XV. STIPULATED PENALTIES

- 64. Unless the noncompliance is excused under Section XIII (Force Majeure), Respondent is liable to EPA for the following stipulated penalties:
- a. for any failure: (i) to pay any amount due under Section XI; (ii) to establish and maintain financial assurance in accordance with Section IX; (iii) to establish any escrow account required under ¶ 62; (iv) to submit timely or adequate deliverables, including those identified in Appendix C of this Settlement.

Period of Noncompliance	Penalty Per Noncompliance Per Day
1st through 14th day	\$1,000
15th through 30th day	\$2,500
31st day and beyond	\$5,000

b. for any failure to submit timely or adequate deliverables required by this Settlement other than those specified in \P 64.a:

Period of Noncompliance	Penalty Per Noncompliance Per Day
1st through 14th day	\$500
15th through 30th day	\$1,000
31st day and beyond	\$2,500

- 65. **Work Takeover Penalty**. If EPA commences a Work Takeover under ¶ 38, Respondent is liable for a stipulated penalty in the amount of \$500,000. This stipulated penalty is in addition to the remedy available to EPA under ¶ 46 (Access to Financial Assurance).
- 66. **Accrual of Penalties**. Stipulated penalties accrue from the date performance is due, or the day a noncompliance occurs, whichever is applicable, until the date the requirement is completed or the final day of the correction of the noncompliance. Nothing in this Settlement

prevents the simultaneous accrual of separate penalties for separate noncompliances with this Settlement. Stipulated penalties accrue regardless of whether Respondent has been notified of its noncompliance, and regardless of whether Respondent has initiated dispute resolution under Section XIV, provided, however, that no penalties will accrue as follows:

- a. with respect to a submission that EPA subsequently determines is deficient under Section 7.5 of the SOW, during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency; or
- b. with respect to a matter that is the subject of dispute resolution under Section XIV, during the period, if any, beginning on the 21st day after the later of the date that EPA's Statement of Position is received or the date that Respondent's reply thereto (if any) is received until the date of the Formal Decision under ¶ 61.b.
- **Demand and Payment of Stipulated Penalties**. EPA may send Respondent a demand for stipulated penalties. The demand will include a description of the noncompliance and will specify the amount of the stipulated penalties owed. Respondent may initiate dispute resolution under Section XIV within 30 days after receipt of the demand. Respondent shall pay the amount demanded or, if it initiates dispute resolution, the uncontested portion of the amount demanded, within 30 days after receipt of the demand. Respondent shall pay the contested portion of the penalties determined to be owed, if any, within 30 days after the resolution of the dispute. Each payment for: (a) the uncontested penalty demand or uncontested portion, if late; and (b) the contested portion of the penalty demand determined to be owed, if any, must include an additional amount for Interest accrued from the date of receipt of the demand through the date of payment. Respondent shall make payment at https://www.pay.gov using the link for "EPA Miscellaneous Payments Cincinnati Finance Center" (search for "SFO 1.1" in the search bar), including references to the Site/Spill ID number listed in ¶89, and the purpose of the payment. Respondent shall send a notice of this payment to EPA, in accordance with Appendix D of this Settlement. The payment of stipulated penalties and Interest, if any, does not alter any obligation by Respondent under the Settlement.
- 68. Nothing in this Settlement limits the authority of EPA: (a) to seek any remedy otherwise provided by law for Respondent's failure to pay stipulated penalties or interest; or (b) to seek any other remedies or sanctions available by virtue of Respondent's noncompliances with this Settlement or of the statutes and regulations upon which it is based, including penalties under section 122(l) of CERCLA, and punitive damages pursuant to section 107(c)(3) of CERCLA, provided, however, that EPA may not seek civil penalties under section 122(l) of CERCLA or punitive damages pursuant to section 107(c)(3) of CERCLA for any noncompliance for which a stipulated penalty is provided for in this Settlement, except in the case of a willful noncompliance with this Settlement.
- 69. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued under this Settlement.

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70. No action or decision by EPA pursuant to this Settlement gives rise to any right to judicial review, except as set forth in section 113(h) of CERCLA.

XVI. COVENANTS BY EPA

- 71. **Covenants for Respondent**. Subject to ¶ 73, EPA covenants not to sue or to take administrative action against Respondent under sections 106 and 107(a) of CERCLA regarding the Work and Future Response Costs.
- 72. The covenants under \P 71: (a) take effect upon the Effective Date; (b) are conditioned on the complete and satisfactory performance by Respondent of the requirements of this Settlement; (c) extend to the successors of Respondent but only to the extent that the alleged liability of the successor of the Respondent is based solely on its status as a successor of the Respondent; and (d) do not extend to any other person.
- 73. **General Reservations**. Notwithstanding any other provisions of this Settlement, EPA reserves, and this Settlement is without prejudice to, all rights against Respondent regarding the following:
- a. liability for failure by Respondent to meet a requirement of this Settlement;
 - b. liability for performance of response action other than the Work;
- c. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site;
- d. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments; and
 - e. criminal liability.
- 74. Subject to ¶ 71, nothing in this Settlement limits any authority of EPA to take, direct, or order all appropriate action to protect public health and welfare and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of Waste Material on, at, or from the Site, or to request a Court to order such action.

XVII. COVENANTS BY RESPONDENT

75. Covenants by Respondent

a. Subject to ¶ 76, Respondent covenants not to sue and shall not assert any claim or cause of action against the United States under CERCLA, RCRA § 7002(a), the United States Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, the Constitution of the Commonwealth of Virginia, Commonwealth of Virginia law, or at common law regarding the Work or Future Response Costs.

- b. Subject to ¶ 76, Respondent covenants not to seek reimbursement from the Fund through CERCLA or any other law for costs of the Work Future Response Costs.
- 76. **Respondent's Reservation**. The covenants in ¶ 75 do not apply to any claim or cause of action brought, or order issued, after the Effective Date by the United States to the extent such claim, cause of action, or order is within the scope of a reservation under ¶¶ 73.a through 73.d.
- 77. De Micromis Waiver. Respondent shall not assert any claims and waives all claims or causes of action (including claims or causes of action under sections 107(a) and 113 of CERCLA) that it may have for all matters relating to the Site against any person where the person's liability to Respondent with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if all or part of the disposal, treatment, or transport occurred before April 1, 2001, and the total amount of material containing hazardous substances contributed by such person to the Site was less than 110 gallons of liquid materials or 200 pounds of solid materials. This waiver does not apply to any claim or cause of action against any person otherwise covered by such waiver if EPA determines that: (i) the materials containing hazardous substances contributed to the Site by such person contributed significantly or could contribute significantly, either individually or in the aggregate, to the cost of the response action or natural resource restoration at the Site; or (ii) such person has failed to comply with any information request or administrative subpoena issued under sections 104(e) or 122(e)(3)(B) of CERCLA or section 3007 of RCRA, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site; or if (iii) such person has been convicted of a criminal violation for the conduct to which the waiver would apply and that conviction has not been vitiated on appeal or otherwise. This waiver does not apply with respect to any defense, claim, or cause of action that Respondent may have against any person otherwise covered by this waiver if such person asserts a claim or cause of action relating to the Site against such Respondent.
- 78. Respondent agrees not to seek judicial review of the final rule listing the Site on the NPL based on a claim that changed site conditions that resulted from the performance of the Work in any way affected the basis for listing the Site.

XVIII. EFFECT OF SETTLEMENT; CONTRIBUTION

79. The Parties agree that: (a) this Settlement constitutes an administrative settlement under which Respondent has, as of the Effective Date, resolved its liability to the United States within the meaning of sections 113(f)(2), 113(f)(3)(B), and 122(h)(4) of CERCLA; and (b) Respondent is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by sections 113(f)(2) and 122(h)(4) of CERCLA, or as may be otherwise provided by law, for the "matters addressed" in this Settlement. The "matters addressed" in this Settlement are the Work and Future Response Costs, provided, however, that if the United States exercises rights against Respondent under the reservations in ¶¶ 73.a through 73.d, the "matters

addressed" in this Settlement do not include those response costs or response actions that are within the scope of the exercised reservation.

- 80. Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement, notify EPA no later than 60 days prior to the initiation of such suit or claim. Respondent shall, with respect to any suit or claim brought against it for matters related to this Settlement, notify EPA within 10 days after service of the complaint on such Respondent. In addition, Respondent shall notify EPA within 10 days after service or receipt of any Motion for Summary Judgment and within 10 days after receipt of any order from a court setting a case for trial.
- 81. **Res Judicata and Other Defenses**. In any subsequent administrative or judicial proceeding initiated against Respondent by EPA or by the United States on behalf of EPA for injunctive relief, recovery of response costs, or other appropriate relief relating to the Site, Respondent shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, claim preclusion (res judicata), issue preclusion (collateral estoppel), claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case.
- 82. Nothing in this Settlement diminishes the right of the United States under sections 113(f)(2) and (3) of CERCLA to pursue any person not a party to this Settlement to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to section 113(f)(2).

XIX. RECORDS

83. **Respondent's Certification**. Respondent certifies that to the best of its knowledge and belief, after thorough inquiry it has not altered, mutilated, discarded, destroyed, or otherwise disposed of any Records (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by EPA or the State.

84. Retention of Records and Information

- a. Respondent shall retain, and instruct their contractors and agents to retain, the following documents and electronically stored data ("Records") until 10 years after the Notice of Completion of the Work under Section 7.7 of the SOW (the "Record Retention Period"):
 - (1) All records regarding Respondent's liability under CERCLA regarding the Site;
 - (2) All reports, plans, permits, and documents submitted to EPA in accordance with this Settlement, including all underlying research and data; and

- (3) All data developed by, or on behalf of, Respondent in the course of performing the Work.
- b. Respondent shall retain all Records regarding the liability of any person under CERCLA regarding the Site during the Record Retention Period.
- c. At the end of the Record Retention Period, Respondent shall notify EPA that it has 90 days to request the Respondent's Records subject to this Section. Respondent shall retain and preserve their Records subject to this Section until 90 days after EPA's receipt of the notice. These record retention requirements apply regardless of any corporate record retention policy.
- 85. Respondent shall provide to EPA, upon request, copies of all Records and information required to be retained under this Section. Respondent shall also make available to EPA, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

86. Privileged and Protected Claims

- a. Respondent may assert that all or part of a record requested by EPA is privileged or protected as provided under federal law, in lieu of providing the record, provided that Respondent comply with ¶ 86.b, and except as provided in ¶ 86.c.
- b. If Respondent asserts a claim of privilege or protection, it shall provide EPA with the following information regarding such record: its title; its date; the name, title, affiliation (e.g., company or firm), and address of the author, of each addressee, and of each recipient; a description of the record's contents; and the privilege or protection asserted. If a claim of privilege or protection applies only to a portion of a record, Respondent shall provide the record to Plaintiff in redacted form to mask the privileged or protected portion only. Respondent shall retain all records that it claims to be privileged or protected until EPA has had a reasonable opportunity to dispute the privilege or protection claim and any such dispute has been resolved in Respondent's favor.
- c. Respondent shall not make any claim of privilege or protection regarding: (1) any data regarding the Site, including all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological or engineering data, or the portion of any other record that evidences conditions at or around the Site; or (2) the portion of any record that Respondent is required to create or generate in accordance with this Settlement.
- 87. **Confidential Business Information Claims**. Respondent is entitled to claim that all or part of a record submitted to EPA under this Section is Confidential Business Information ("CBI") that is covered by section 104(e)(7) of CERCLA and 40 C.F.R. § 2.203(b). Respondent shall segregate all records or parts thereof submitted under this Settlement which it claims are CBI and label them as "claimed as confidential business information" or "claimed as CBI." Records that a submitter properly labels in accordance with the preceding sentence will be afforded the protections specified in 40 C.F.R. part 2, subpart B. If the records are not properly

labeled when they are submitted to EPA, or if EPA notifies the submitter that the records are not entitled to confidential treatment under the standards of section 104(e)(7) of CERCLA or 40 C.F.R. part 2, subpart B, the public may be given access to such records without further notice to the submitter.

88. Notwithstanding any provision of this Settlement, EPA retains all of its information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XX. NOTICES AND SUBMISSIONS

89. All agreements, approvals, consents, deliverables, modifications, notices, notifications, objections, proposals, reports, waivers, and requests specified in this Settlement must be in writing unless otherwise specified. Whenever a notice is required to be given or a report or other document is required to be sent by one Party to another under this Settlement, it must be sent as specified below. All notices under this Section are effective upon receipt, unless otherwise specified. In the case of emailed notices, there is a rebuttable presumption that such notices are received on the same day that they are sent. Any Party may change the method, person, or address applicable to it by providing notice of such change to all Parties.

As to EPA: *via email to*:

Paul Leonard, Director

Superfund & Emergency Mgmt. Div.

leonard.paul@epa.gov

AND

Connor O'Loughlin, Project Coordinator oloughlin.connor@epa.gov Re: Site/Spill ID # B3DY

AND

R3 ORC mailbox@epa.gov

As to the Regional via email to:

Financial Management cinwd acctsreceivable@epa.gov

Officer: Re: Site/Spill ID # B3DY

As to *via email to*:

Respondent: Tyson E. Campbell, P.E.

Remediation Manager

DuPont Corporate Remediation Group Tyson.E.Campbell@dupont.com

XXI. APPENDIXES

- 90. The following appendixes are attached to and incorporated into this Settlement:
 - "Appendix A" is the map of the Site.
 - "Appendix B" is the Statement of Work.
 - "Appendix C" is the list of Stipulated Penalties.
 - "Appendix D" is the notice provisions for Stipulated Penalties.

XXII. MODIFICATIONS TO SETTLEMENT

91. Except as provided in ¶ 36 (Modifications to the Work), both nonmaterial and material modifications to the Settlement and ¶ 7.5 of the SOW (Approval of Deliverables) must be in writing and are effective when signed (including electronically signed) by the Parties.

XXIII. SIGNATORIES

92. The undersigned representative of EPA and the undersigned representative of a Respondent certifies that he or she is authorized to enter into the terms and conditions of this Settlement and to execute and legally bind such party to this Settlement.

XXIV. INTEGRATION

93. This Settlement constitutes the entire agreement among the Parties regarding the subject matter of the Settlement and supersedes all prior representations, agreements, and understandings, whether oral or written, regarding the subject matter of the Settlement embodied herein.

XXV. EFFECTIVE DATE

94. This Settlement is effective when EPA issues notice to Respondent that the Regional Administrator or their delegatee has signed the Settlement.

IT IS SO AGREED AND ORDERED:

BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY:

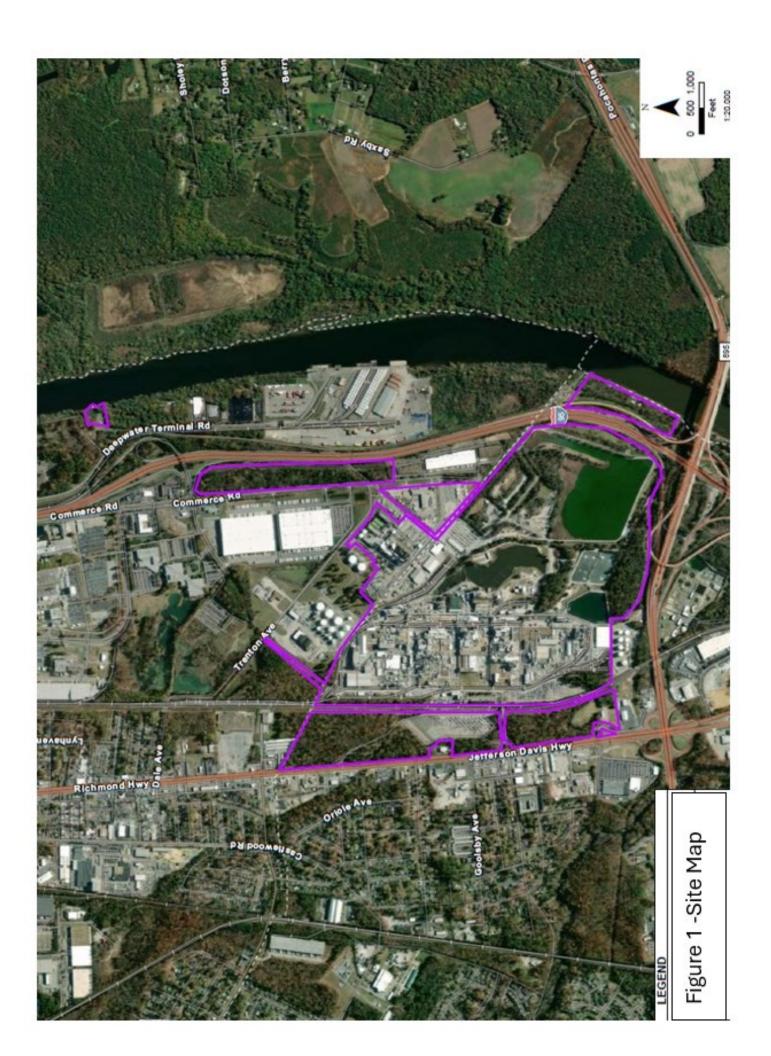
[digitally signed and dated]
PAUL LEONARD, Director
Superfund & Emergency Management Division
U.S. Environmental Protection Agency
Region III

Signature Page for Administrative Settlement Agreement and Order on Consent for Remedial Investigation and Feasibility Study regarding the DuPont Spruance Superfund Site.

> FOR: DUPONT SPECIALTY PRODUCTS USA, LLC

Name: Lori E. Sarders
Title: Chief Environmental Counsel
Address: 974 Centre tod
Wilmington, DE 19805

APPENDIX ASite Map



APPENDIX B Statement of Work

REMEDIAL INVESTIGATION/FEASIBILITY STUDY STATEMENT OF WORK

DUPONT SPRUANCE SUPERFUND SITE

Richmond, Chesterfield County, Virginia EPA Region 3

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1. INTRODUCTION

- 1.1 Purpose of the SOW. This SOW sets forth the procedures, requirements, and recommendations for implementing the Work to develop and perform the remedial investigation ("RI") and the feasibility study ("FS") of the Site. Further, this SOW is a part of and incorporated into the Administrative Settlement Agreement and Order on Consent, CERCLA Docket No. CERCLA-03-2025-0165DC ("Settlement").
- 1.2 The terms used in this SOW that are defined in CERCLA, in regulations promulgated under CERCLA, or in the Settlement, have the meanings assigned to them in CERCLA, in such regulations, or in the Settlement, except that the term "Paragraph" or "¶" means a paragraph of the SOW and that the term "Section" means a section of the SOW, unless otherwise stated. If there is a conflict between this SOW and the Settlement, the provisions of the Settlement shall govern.
- 1.3 At the completion of the RI/FS, EPA will be responsible for identifying a preferred remedy, soliciting, and reviewing public comments on the proposed plan, and the selection of a Site remedy, and will document this selection in a record of decision ("ROD"). The remedial action alternative selected by EPA will meet the cleanup standards specified in CERCLA § 121. As specified in CERCLA § 104(a)(1), as amended, EPA or its representatives will provide oversight of Respondent's activities throughout the RI/FS and further as provided.
- 1.4 Modifications to the SOW will follow procedures described in Sections VII (Performance of the Work) and XXI in the Settlement. Respondent shall refer to the Guidance for Conducting Remedial Investigations and Feasibility Studies, OSWER 9355.3-01, EPA/540/G-89/004 (Oct. 1988) ("RI/FS Guidance") in performing their responsibilities under this SOW.
- 1.5 This SOW is not intended to modify current EPA guidance or regulations, including but not limited to the guidance documents referenced in ¶ 10.1. Current EPA guidance and regulations shall control in the event of any conflict between the SOW and current EPA guidance and regulations.

2. COMMUNITY INVOLVEMENT

As requested by EPA, Respondent shall conduct community involvement activities under EPA's oversight as provided for, and in accordance with this Section. Such activities must include designation of a Community Involvement Coordinator ("CI Coordinator" and implementation of a Technical Assistance Plan ("TAP").

2.2 Community Involvement Responsibilities

(a) EPA has the lead responsibility for developing and implementing community involvement ("CI") activities at sites. This includes compliance with 40 C.F.R. § 300.430(c)(2) (outlining the lead agency's community involvement responsibilities) and the preparation of a Community Involvement Plan (CIP)

- specifying the CI activities expected to be undertaken during the remedy response.
- (b) Such activities include not only notifying the community of the availability of a TAP but also, where appropriate, potential use of EPA's Technical Assistance Services for Communities contract. EPA is also responsible for compliance with § 300.815(a) (making administrative record available to the public) and § 300.430(f)(3)(i)(C) (providing reasonable opportunity for submission of comments on the RI/FS and Proposed Plan), respectively.
- (c) **Respondent's CI Coordinator.** As requested by EPA, Respondent shall designate and notify EPA of Respondent's CI Coordinator. Respondent may hire a contractor for this purpose. Respondent's notice shall include the name, title, and qualifications of their CI Coordinator. Respondent's CI Coordinator is responsible for providing support regarding EPA's CI activities, including coordinating with EPA's CI Coordinator regarding responses to the public's inquiries and/or requests for information or data about the Site.
- (d) As requested by EPA, Respondent shall participate in and/or conduct community involvement activities, including participation in (1) the preparation of information regarding the field sampling activities for dissemination to the public, with consideration given to including local and mass media and/or internet notification, (2) public meetings that may be held or sponsored by EPA to explain activities at or relating to the Site, and (3) add other activities EPA decides are necessary to protect and address the concerns of affected communities, e.g., "giving presentations" or providing interpretation and/or translation services. Respondent's support of EPA's community involvement activities may include providing online access to initial submissions and updates of deliverables to (1) any Community Advisory Groups, (2) any TAP recipients and their advisors, and (3) other entities to provide them with a reasonable opportunity for review and comment. EPA may describe in its CIP Respondent's responsibilities for community involvement activities. All community involvement activities conducted by Respondent at EPA's request are subject to EPA's oversight. Upon EPA's request, Respondent shall establish, as early as feasible, a community information repository at or near the Site, as provided in the CIP, to house one copy of the administrative record.

2.3 Information for the Community.

(a) As requested by EPA, Respondent shall develop and provide to EPA information about the RI/FS including: (1) any validated data from field sampling activities as provided in ¶ 2.3(b) below; (2) schedules prepared under Section 9; (3) dates that Respondent completed each task listed in the schedules; and (4) digital photographs of the Work being performed, together with descriptions of the Work depicted in each photograph, the purpose of the Work, the equipment being used, and the location of the Work. The EPA Project Coordinator may use this information for communication to the public via EPA's website, social media, or

- local and mass media. The information provided to EPA shall be suitable for sharing with the public (*e.g.*, drafted in plain language) and the education levels of the community. Translations shall be in the dominant language(s) of community members with limited English proficiency.
- (b) As requested by EPA, Respondent shall describe all community impact mitigation activities to be performed: (i) to reduce impacts (e.g., air emissions, dust, odor, traffic, noise, temporary relocation, negative economic effects) to residential areas, schools, playgrounds, healthcare facilities, or recreational public areas frequented by community members ("Community Areas") during field sampling activities; (ii) to conduct monitoring in Community Areas of impacts from field sampling activities; (iii) to communicate validated sampling data; (iv) to make adjustments during field sampling activities in order to further reduce negative impacts to affected Community Areas; and (v) any additional activities as appropriate. Descriptions shall contain information about impacts to Community Areas that is sufficient to assist EPA's Site team in performing the evaluations recommended under the *Superfund Community Involvement Handbook*, OLEM 9230.0-51(Mar. 2020). EPA's Remedial Project Manager ("RPM") and CI Coordinator will review and approve all proposed activities.

2.4 Respondent's Responsibilities for a Technical Assistance Plan

- (a) At EPA's request, Respondent shall arrange for a qualified community group to receive the services of a technical advisor(s) who can: (i) help group members understand Site cleanup issues (specifically, to interpret and comment on Siterelated documents developed under this SOW); and (ii) share this information with others in the community. The technical advisor(s) will be independent from Respondent. Respondent's TAP assistance will be limited to \$50,000, except as provided in ¶ 2.4(d)(3), and will end when EPA issues the ROD based on the RI/FS conducted pursuant to this SOW. Respondent shall implement this requirement under a TAP.
- (b) At EPA's request, Respondent shall cooperate with EPA in soliciting interest from community groups regarding a TAP at the Site. If more than one community group expresses an interest in a TAP, Respondent shall cooperate with EPA in encouraging the groups to submit a single, joint application for a TAP.
- (c) At EPA's request, Respondent shall, within 30 days, submit a proposed TAP for EPA approval. The TAP shall describe Respondent's plans for the qualified community group to receive independent technical assistance. The TAP must include the following elements:
 - (1) For Respondent to arrange for publication of a notice in local media that they have received a Letter of Intent ("LOI") to submit an application for a TAP. The notice shall explain how other interested groups may also try to combine efforts with the LOI group or submit their own applications, by a reasonable specified deadline;

- (2) For Respondent to review the application(s) received and determine the eligibility of the community group(s). The proposed TAP shall include eligibility criteria as follows:
 - (i) A community group is eligible if it is: (a) comprised of people who are affected by the release or threatened release at the Site, and (b) able to demonstrate its ability to adequately and responsibly manage TAP-related responsibilities by identifying a point of contact for the TAP and provided to EPA a process for communication with the TAP to address community group concerns.
 - (ii) A community group is ineligible if it is: (a) a potentially responsible party ("PRP") at the Site, represents such a PRP, or receives money or services from a PRP (other than through the TAP); (b) affiliated with a national organization; (c) an academic institution; (d) a political subdivision; (e) a tribal government; (f) a group established or presently sustained by any of the above ineligible entities; or (g) a group in which any of the above ineligible entities is represented.
- (3) For Respondent to notify EPA of their determination on eligibility of the applicant group(s) to ensure that the determination is consistent with the SOW before notifying the group(s);
- (4) If more than one community group submits a timely application, for Respondent to review each application and evaluate each application based on the following elements:
 - (i) The extent to which the group is representative of those persons affected by the Site; and
 - (ii) The effectiveness of the group's proposed system for managing TAP-related responsibilities, including its plans for working with its technical advisor and for sharing Site-related information with other members of the community.
- (5) For Respondent to document their evaluation of, and their selection of, a qualified community group, and to brief EPA regarding their evaluation process and choice. EPA may review Respondent's evaluation process to determine whether the process satisfactorily follows the criteria in ¶2.4(c)(4). TAP assistance may be awarded to only one qualified group at a time;
- (6) For Respondent to notify all applicant(s) about Respondent's decision;
- (7) For Respondent to designate a person ("TAP Coordinator") to be their primary contact with the selected community group;

- (8) A description of Respondent's plans to implement the requirements of ¶ 2.4(d) (Agreement with Selected Community Group); and
- (9) For Respondent to submit quarterly progress reports regarding the implementation of the TAP.
- (d) Agreement with Selected Community Group
 - (1) Respondent shall negotiate an agreement with the selected community group that specifies the duties of Respondent and the community group. The agreement shall specify the activities that may be reimbursed under the TAP and the activities that may not be reimbursed under the TAP. The list of allowable activities shall be consistent with 40 C.F.R. § 35.4070 (e.g., obtaining the services of an advisor to help the group understand the nature of the hazards at the Site and the various stages of the response action, and communicating Site information to others in the community). The list of non-allowable activities shall be consistent with 40 C.F.R. § 35.4075 (e.g., activities related to litigation or political lobbying).
 - (2) The agreement shall provide that Respondent's review of the community group's recommended choice for Technical Advisor will be limited, consistent with 40 C.F.R. §§ 35.4190 and 35.4195, to criteria such as whether the advisor has relevant knowledge, academic training, and relevant experience as well as the ability to translate technical information into terms the community can understand.
 - (3) The agreement shall provide that the community group is eligible for additional TAP assistance, if it can demonstrate that it has effectively managed its TAP responsibilities to date, and that at least three of the following eight factors are satisfied:
 - (i) EPA expects that more than eight years (beginning with the initiation of the RI/FS) will pass before construction completion will be achieved;
 - (ii) EPA requires treatability studies or evaluation of new and innovative technologies;
 - (iii) The public health assessment (or related activities) for the Site indicates the need for further health investigations and/or health-related activities;
 - (iv) After Respondent's selection of the community group for the TAP, EPA designates additional operable units at the Site;
 - (v) After Respondent's selection of the community group, a legislative or regulatory change results in significant new Site information;

- (vi) Significant public concern about the Site exists, as evidenced, e.g., by relatively large turnout at meetings, the need for multiple meetings, the need for numerous copies of documents to inform community members, etc.;
- (vii) Any other factor that, in EPA's judgment, indicates that the Site is unusually complex; or
- (viii) A RI/FS costing at least \$2 million is being or was performed at the Site pursuant to this Settlement.
- (4) Respondent is entitled to retain any unobligated TAP funds upon EPA's issuance of its ROD.
- (5) Respondent shall submit a draft of the proposed agreement to EPA for its comments.

3. COORDINATION AND SUPERVISION

3.1 Selection of Project Coordinators and Supervising Contractor

- (a) Respondent's Project Coordinator and Supervising Contractor each: (i) must have sufficient technical expertise to carry out their responsibilities; (ii) may not be attorneys representing Respondent in this matter; (iii) may not be the same person; and (iv) may not have a conflict of interest regarding the project. The Supervising Contractor must have a quality assurance system that complies with the most recent version of Quality Systems for Environmental Data and Technology Programs -- Requirements with Guidance for Use (American National Standard), ANSI/ASQC E4 (Feb. 2014).
- (b) Respondent shall notify EPA, within 10 days after the Effective Date, of the name, title, contact information, and qualifications of their proposed Project Coordinator and Supervising Contractor.
- (c) EPA shall issue a notice of disapproval and/or authorization to proceed regarding any proposed Project Coordinator and Supervising Contractor, as applicable. Any EPA disapproval must be based on the criteria under ¶ 3.1(a).
- (d) Respondent shall follow the procedures of ¶¶ 3.1(a) through 3.1(c): (1) to select an alternate Project Coordinator or Supervising Contractor, as applicable, if EPA issues a notice of disapproval; or (2) to change their Project Coordinator or Supervising Contractor.
- (e) Respondent may assign other representatives, including other contractors, to assist in coordinating the Work.
- 3.2 EPA has designated Connor O'Loughlin, oloughlin.connor@epa.gov, as its Remedial Project Manager ("RPM"). EPA may, with notice to Respondent, designate an alternate

Project Coordinator. EPA may designate other representatives including contractors or consultants to oversee the Work.

3.3 Project Coordinator Responsibilities

- (a) Respondent's Project Coordinator shall communicate with the EPA's RPM at least monthly.
- (b) EPA's RPM has the authorities described in the NCP, 40 C.F.R. § 300.120.

4. REMEDIAL INVESTIGATION

- Investigation Summary Report. Respondent shall prepare a Previous Investigation Summary Report for EPA and Commonwealth review and EPA approval. The report shall include available data relating to the varieties and quantities of hazardous substances, pollutants, or contaminants at the Site. Available data may include results from any previous sampling or other investigations that have been conducted. Respondent will refer to Table 2-1 of the *Guidance for Conducting Remedial Investigations and Feasibility Studies*, OSWER 9355.3-01, EPA/540/G-89/004 (Oct. 1988) for a comprehensive list of data collection information sources. The report shall also describe releases of hazardous substances, pollutants or contaminants into the environment.
- 4.2 Conceptual Site Model Development and Report. The Conceptual Site Model ("CSM") is a representation of the Site that summarizes and helps project teams visualize and understand available information, and which is updated as additional information becomes available. Respondent shall develop (or, as appropriate, update) the CSM for EPA and Commonwealth review and EPA approval. The CSM shall be based upon all available site-specific information. Respondent shall provide the CSM and an accompanying summary report that documents the information used in developing the CSM, why any available information was not used, and recommendations regarding data gaps. Respondent shall update the CSM, as requested by EPA, to account for information obtained during the RI.
- 4.3 Identification of Preliminary RAOs, PRGs and ARARs. Respondent shall develop preliminary remedial action objects ("RAOs"), which are medium-specific goals for protecting human health or the environment that specify the chemicals of concern, exposure route(s) and receptor(s) and preliminary remediation goals ("PRGs"). Respondent shall prepare a memo for EPA and Commonwealth review and EPA approval providing preliminary identification of potential Commonwealth and federal chemical-specific, location-specific and action-specific applicable or relevant and appropriate requirements ("ARARs") to assist in the refinement of RAOs, and the initial identification of remedial alternatives and ARARs associated with particular actions. ARAR identification will continue as Site conditions, contamination, and remedial action alternatives are refined. Respondent shall also incorporate federal and Commonwealth potential ARARs and "to be considered" materials provided by EPA before or with review comments on each deliverable.

- Remedial Investigation Work Plan. Respondent shall submit an RI work plan (a) ("RIWP") to EPA and the Commonwealth for review and EPA approval, consistent with OSWER 9835.1(c). The RIWP shall include a comprehensive description of the RI Work to be performed, including the scope, methodologies, and schedule for completion. The RIWP shall also include all requirements under ¶ 4.3 unless EPA decides that one or more provisions is not necessary. The RI is typically conducted over multiple years where tasks are sequenced and scoped based on the best available information and the CSM. Therefore, there is high probability that either the sequence or scope may change as the CSM is refined and the RI progresses. The RIWP describes areas of a site that may pose potential current or future unacceptable risk to public health or welfare or the environment due to the release or threat of release of chemicals. The RIWP will present a statement describing the release or threat of release of hazardous substances, pollutants or contaminants at or from the Site. Respondent will develop a specific project scope based on EPA's remedial strategy for the Site ("Site Strategy"). If commingled contamination (e.g., hazardous substances comingled with pollutants or contaminants) is discovered at the Site, then addressing the constituents contaminated in the commingled contamination shall be incorporated into the FS. The RI shall consist of collecting data to characterize Site conditions (including meteorology affecting the Site, 40 C.F.R. § 300.430(d)(2)(i)), determining the nature and extent of the contamination at or from the Site, assessing risk to human health, sensitive populations (40 C.F.R. § 300.430(d)(2)(vii)) and the environment, and conducting treatability testing as necessary to evaluate the potential performance and cost of the treatment technologies that are being considered. Respondent shall identify which environmental or other hazards (e.g., sea level changes, increased severity of wildfire, increased storm intensity, increased flood risk, etc.) may affect the potential remedies at the Site. Respondent shall evaluate the current and potential chemical releases and unacceptable exposure pathways.
- (b) In its description of the methodologies to be used to perform any RI Work, the RIWP shall consider the environmental footprint of all such activities and, to the extent practicable, take actions to minimize said footprint. The RIWP shall be consistent with the *Consideration of Greener Cleanup Activities in the Superfund Cleanup Process* (Aug. 2, 2016). These considerations for greener cleanups are not intended to allow cleanups that do not satisfy threshold requirements for protectiveness, or do not meet other site-specific cleanup objectives. Greener cleanup activities refer to strategies designed to help minimize the environmental footprint of cleaning up contaminated sites and ensure a protective remedy within the applicable CERCLA statutory and regulatory framework.
- **4.4 RIWP Deliverables.** The Respondent shall submit the following deliverables for EPA review and approval unless EPA decides that one or more provisions is not necessary:
 - (a) **Quality Assurance.** All work conducted by the respondent will be consistent with EPA's Environmental Information Quality Policy (CIO 2105.4 2023) and

- ASQ/ANSI E-4 (Quality MGMT Systems for Environmental Information & Tech.).
- (b) **Quality Management Plan**. The respondent will provide to EPA a Quality Management Plan which complies with EPA's Quality Management Plan Standard (CIO 2105-S-01.1) to be approved by EPA with Commonwealth consultation.
- (c) Quality Assurance Project Plan. The Respondent will provide a Quality Assurance Project Plan in the UFP-QAPP format ((EPA-505-B-04-900A, 2005) consistent with EPA Quality Assurance Project Plan Standard (CIO 2105-S-02.1) (2024) whenever the respondent is collecting, producing, evaluating or using environmental information as defined by EPA's Environmental Information Quality Policy (CIO 2105.4 2023). Work will not commence prior to the QAPP being approved by EPA in consultation with the Commonwealth.
 - (1) **Field Sampling Plan**. The field sampling plan ("FSP") shall be written so that personnel unfamiliar with the project will be able to gather the samples and field information required. The FSP shall be prepared in accordance with RI/FS Guidance.
- (d) Emergency Response (ER) and Notification Plan. The ER and Notification Plan shall describe procedures to be used in the event of an accident or emergency at the Site (e.g., power outages, water impoundment failure, treatment plant failure, slope failure, etc.). The ER and Notification Plan shall include:
 - (1) Name of the person or entity responsible for responding in the event of an emergency incident;
 - (2) Plan and date(s) for meeting(s) with the local community, including local, and Commonwealth, and federal agencies involved in the cleanup, as well as local emergency squads and hospitals;
 - (3) If applicable, a Spill Prevention, Control, and Countermeasures Plan consistent with the requirements of 40 C.F.R. part 112 (describing measures to prevent, and contingency plans for, spills and discharges);
 - (4) Notification activities in accordance with ¶ 6.6(b) (Release Reporting) in the event of a release of hazardous substances requiring reporting under sections 103 or 111(g) of CERCLA, or section 304 of the Emergency Planning and Community Right-to-know Act ("EPCRA"), 42 U.S.C. § 11004; and
 - (5) A description of all necessary actions to ensure compliance with Section 6 (Meetings, Reporting, and Permits) in the event of an occurrence during the performance of the Work that causes or threatens a release of a hazardous substance, pollutant or contaminant at or from the Site that

constitutes an emergency or may present an immediate threat to human health or welfare or the environment.

- (e) **Health and Safety Plan**. The Health and Safety Plan ("HASP") shall describe all activities to be performed to protect on-Site personnel from physical, chemical, and all other hazards posed by the field sampling. The HASP shall: (1) be prepared in accordance with EPA's *Emergency Responder Health and Safety Manual* and Occupational Safety and Health Administration ("OSHA") requirements under 29 C.F.R. §§ 1910 and 1926; and (2) shall address RI Work and include contingency planning. EPA does not approve the HASP but will review it to ensure that all necessary elements are included and that the plan provides for the protection of human health and the environment.
- (f) **Field Summary and Other Technical Reports**. Respondent shall provide a report after the field activity demobilization that addresses the collection, processing, management, distribution, analysis, and archival of data and information. These reports will be reviewed and approved by EPA with Commonwealth consultation.
- (g) Reuse Assessment. Respondent will prepare a reuse assessment in accordance with the SOW, RIWP, and applicable EPA guidance. The reuse assessment will inform the development of realistic land use assumptions. The reuse assessment also informs the baseline risk assessments when estimating potential future risks and preliminary RAOs and supports the remedy selection process. Respondent shall update the reuse assessment, as requested by EPA, to account for information obtained during the RI.
- (h) Baseline HHRA and ERA. Respondent shall perform the Baseline Human Health Risks Assessment ("Baseline HHRA") and Ecological Risk Assessment ("ERA") in accordance with the SOW and the NCP, including the 40 C.F.R. § 300.430(d)(2)(vii) provision on sensitive populations, RIWP, and applicable EPA guidance. Additionally, Respondent shall ensure that risk assessments incorporate site-specific exposure assumptions based on: awareness of community practices and concerns, and anticipated changes to weather. Respondent shall use current EPA-recommended screening tools as identified by EPA during the scoping of the Baseline HHRA. If requested by EPA, Respondent shall use site resiliency screening tools Respondent (e.g., forward-looking data) to evaluate the affect that anticipated changes to weather have on the results of the Baseline HHRA and ERA. The evaluation of site-specific exposure assumptions shall be discussed in the risk assessment as appropriate. Potential overestimation and/or underestimation of risk associated with community practices and site vulnerability shall be presented in the uncertainty discussion. Risk assessments will be reviewed and approved by EPA with Commonwealth consultation. Respondent shall identify and document all sources of information reviewed to address the human health and ecological assessment endpoints.

- (i) **Preliminary IC Evaluation.** The Respondent shall submit a preliminary institutional control (IC) evaluation for EPA and Commonwealth review and EPA approval. The IC evaluation will describe potential land and/or resource use restrictions and their relationship to the preliminary RAOs. The IC evaluation will also identify potential IC instruments (or layered instruments), including those who potentially are responsible for implementing, maintaining, and enforcing the ICs. The IC evaluation will include an estimate for how long IC instruments (or layered instruments) shall remain in place. The IC evaluation will inform development of the FS (comparative analysis of alternatives) and Institutional Controls Implementation and Assurance Plan ("ICIAP").
- pursuant to ¶ 7.5 (Approval of Deliverables), a draft RI report consistent with the SOW, RIWP, and with EPA guidance and regulations. This report shall summarize results of field activities to characterize the Site, including the sources of, nature and extent of, and fate and transport of contamination. Respondent will refer to the RI/FS Guidance for an outline of the report format and contents. Following comments by EPA and the Commonwealth, Respondent will prepare a final RI report which satisfactorily addresses these comments.
- **4.5 Treatability Study**. Respondent shall conduct treatability studies, except where the Respondent can demonstrate to EPA's satisfaction that they are not needed. Respondent shall provide EPA and The Commonwealth with the following deliverables for review:
 - (a) Identification of Candidate Treatability Study Technologies Memorandum. This summarizes a literature review of applicable technologies to gather information on performance, relative costs, applicability, removal efficiencies, operation and maintenance requirements, and implementability of candidate treatability study technologies. This memorandum shall be submitted as set forth in the RIWP or "as specified by EPA," or other scheduling provision preferred by the Region for EPA approval.
 - (b) **Treatability Test Work Plan**. If EPA determines that treatability testing is required, Respondent shall submit a treatability test work plan, including a schedule, FSP, QAPP and HASP, for EPA review and approval as appropriate.
 - (c) **Treatability Study Evaluation Report**. Upon completion of the treatability studies, Respondent shall submit a treatability study evaluation report that includes:
 - (1) An evaluation of the effectiveness, implementability, and cost of each technology.
 - (2) An evaluation of the actual results of each technology as compared with predicted results.
 - (3) An analysis and interpretation of testing results.

(4) An evaluation of full-scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

Following comments by EPA and the Commonwealth, Respondent will prepare a final report which satisfactorily addresses these comments.

5. FEASIBILITY STUDY

- 5.1 Feasibility Study. The FS shall identify and evaluate (based on treatability testing, where appropriate) remedial alternatives to prevent, mitigate, or otherwise respond to or remediate the release or threatened release of hazardous substances, pollutants or contaminants at or from the Site. If there is potential commingling of hazardous substances with pollutants or contaminants at the Site, then the evaluation of the potential performance and cost of the treatment technologies should also take into account the ability of those treatment technologies to address the commingled contamination (e.g., hazardous substances comingled with pollutants or contaminants) and any adverse impacts the comingled contamination may have on the ability and cost of the treatment technologies to address the release or threatened release at the Site. The remedial alternatives evaluated shall include, but shall not be limited to, the range of alternatives described in the NCP, 40 C.F.R. § 300.430(e), and shall include remedial actions that utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. Respondent shall also evaluate potential impacts that treatment technologies have on other hazardous substances, pollutants or contaminants at or from the Site. In evaluating the alternatives, Respondent shall address the factors required by section 121 of CERCLA, and 40 C.F.R. § 300.430(e).
- **5.2 FS Deliverables.** The Respondent shall develop the FS deliverables in accordance with the RI/FS Guidance. The Respondent shall submit the following deliverables for EPA review and approval unless EPA decides that one or more provisions is not necessary:
 - Refine RAOs, PRGs and ARARs. Respondent shall prepare a memorandum (a) revising the RAOs, PRGs and ARARs to include potential ARARs specific to actions and locations described in ¶ 4.3 with the findings of the RI. Respondent will review and, if necessary, modify the site-specific RAOs, specifically the PRGs, that were established by EPA prior to or during discussions between EPA and Respondent. The revised RAOs and PRGs will be documented in this memorandum that will be reviewed and approved by EPA. These modified PRGs will specify the contaminants and media of interest, exposure pathways and receptors, and an acceptable contaminant level or range of levels (at locations for each exposure route), basis for the value, and the associated residual risk. This memorandum will discuss the consideration of sensitive subgroups in determining the acceptable exposure levels for sites with systemic toxicants, in accordance with 40 C.F.R. § 300.430(e)(2)(i)(A)(1). In addition, the memorandum will discuss whether the ARARs may not be sufficiently protective given the presence of multiple contaminants at the Site or multiple pathways of exposure for sites

with known or suspected carcinogens, in accordance with 40 C.F.R. § 300.430(e)(2)(i)(A)(2).

- (b) Identify and Evaluate Remedial Technologies and Assemble Alternatives. Concurrent with ¶ 5.2(a), Respondent shall assemble combinations of technologies, and the media to which they would be applied, into remedial alternatives that address contamination on a sitewide basis or for an identified operable unit. Deliverables will be reviewed and approved by EPA with Commonwealth consultation. Respondent shall: (i) develop general response actions for each medium of interest defining containment, treatment, excavation, pumping, or other actions, singly or in combination, that may be taken to satisfy the RAOs for the Site; (ii) identify volumes or areas of media to which general response actions might be applied, taking into account the requirements for protectiveness as identified in the RAOs and the chemical and physical characterization of the Site; and (iii) identify and screen the technologies applicable to each general response action to eliminate those that cannot be implemented technically at the Site. The general response actions are further refined to specify remedial technology types (e.g., the general response action of treatment can be further defined to include chemical or biological technology types). Respondent shall assemble the selected representative technologies into alternatives representing a range of treatment and containment combinations, as appropriate.
- (c) Comparative Analysis of Alternatives. Upon EPA approval of ¶ 5.2(a) and (b), Respondent shall conduct a comparative analysis of alternatives to evaluate the relative performance of each alternative in relation to the nine evaluation criteria identified below in this paragraph and prepare a summary report. This range of alternatives shall include, as appropriate, options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, but varying in the types of treatment, the amount treated, and long-term residuals or untreated wastes are managed. The analysis will include options involving treatment and/or containment; and a no-action alternative. The evaluation criteria include: (1) overall protection of human health and the environment; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume through treatment; (5) short-term effectiveness; (6) implementability; (7) cost; (8) state (or support agency) acceptance; and (9) community acceptance. The analysis shall (consistent with 40 C.F.R. § 300.430(e)(9)(iii)(C)) include an assessment of the vulnerability of the protectiveness of each alternative to the impacts of changing weather conditions and, for each alternative where appropriate, an evaluation of the possible addition of further measures to ensure the resilience of a particular alternative's protectiveness. In addition, where appropriate for particular evaluation criteria, Respondent shall also evaluate, to the extent practicable, opportunities to reduce the environmental footprint of each alternative. Such evaluation shall include the consideration of green remediation best management practices and/or application of the ASTM Standard for Greener Cleanups, consistent with Consideration of Greener Activities in the Superfund Cleanup Process (Aug. 6, 2016). These

considerations for greener cleanups are not intended to allow cleanups that do not satisfy threshold requirements for protectiveness, or do not meet other site-specific cleanup objectives.

For each alternative, Respondent shall provide: (1) a description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative, and (2) a discussion of the individual criterion assessment. If the Respondent do not have direct input on criteria (8), state (or support agency) acceptance, and criteria (9), community acceptance, these will be addressed by EPA. Note that criteria (8) and (9) are not addressed until after the Proposed Plan.

- (d) Community Concerns about Impacts. Consistent with 40 C.F.R. § 300.430(e)(2)(i)(A)(1) and with consideration of communities with concerns identified in the Baseline HHRA, Respondent shall identify different remedial alternatives in the FS to address, where applicable and in consultation with and as approved by EPA, such concerns regarding the potential for impacts from the contaminated site, including through the site's contribution to cumulative impacts on the affected community. Evaluation of the potential for impacts to the community shall consider indicators of population vulnerability and pollutant burden; as well as other available data on population vulnerability and pollution burden (including public health outcomes reflecting cumulative impacts) and information obtained during community outreach efforts. Respondent shall identify and document in a memorandum for EPA review and approval all sources of information reviewed and implemented to address the concerns.
- (e) **Refine IC Evaluation.** Concurrent with ¶ 5.2(d), Respondent shall prepare a memorandum revising the ICs in ¶ 4.4(i) with the findings of the RI. Respondent will review and, if necessary, modify the site-specific interim and permanent ICs that were established by EPA prior to or during discussions between EPA and Respondent. ICs need to be enforceable under CERCLA, rather than relying on local controls, such as zoning. The ICs evaluation shall also identify how the ICs response actions components fit with the relevant criteria outlined in the NCP (40 C.F.R. § 300.430(e)(9)(iii)) such as: compliance with ARARs; long-term effectiveness and permanence; short-term effectiveness; implementability; cost; state acceptance; and community acceptance. The IC analysis shall be submitted for review and approval by EPA and added as an appendix to the draft FS Report.
- (f) **Draft FS Report**. Following ¶¶ 5.2(d) and (e), Respondent shall submit to EPA and the Commonwealth a draft FS report for review and approval pursuant to ¶ 7.5 (Approval of Deliverables). Respondent shall refer to Table 6-5 of the RI/FS Guidance for report content and format. The FS report and the administrative record shall provide sufficient information to support the remedial alternatives analysis and remedy selection under sections 113(k) and 117(a) of CERCLA. Respondent will prepare a final FS report which satisfactorily addresses EPA and Commonwealth comments.

6. MEETINGS, PERMITS, and REPORTS

6.1 Meetings

- Kickoff meeting. Within 30 days of EPA's receipt of the Previous Investigation Summary Report (Section 4.1) and the CSM Report (Section 4.2) and prior to the submission of the RI Work Plan (Section 4.3(a)), Respondent shall schedule a kickoff meeting with technical staff, EPA, the Commonwealth, and other stakeholders to discuss the statement of work, a Site visit, and document review needs. EPA will determine the Site-specific objectives of the RI and will provide Respondent a strategic approach, per ¶ 4.4 of this SOW. The meeting will also be used to outline project-specific requirements including: project objectives, data gaps, potential sampling and analysis methods, and performance goals. The deliverable after the kickoff meeting will be a project schedule and RI work plan under ¶ 4.4. The kickoff meeting and systematic planning meetings referenced in ¶ 6.1(b) will be documented in the QAPP.
- (b) **Systematic Project Planning Meetings**. Within the schedule set forth in the RI Work Plan, Respondent shall schedule systematic project planning meetings with EPA and the Commonwealth. Systematic project planning is a process that requires Respondent, the Commonwealth, and EPA to convene during key milestones in the RI/FS schedule in order to update the CSM, and to review the sequence and scope of upcoming RI/FS tasks to determine if they are still appropriate or need modification.
- (c) **Meetings**. Respondent shall participate in meetings and make presentations at the request of EPA during the preparation of the RI/FS. Topics will include anticipated problems, RI/FS updates, or new issues. Meetings will be scheduled at EPA's discretion.
- **6.2 Progress Reports.** Commencing the month following the Effective Date of the Settlement and until EPA approves the FS report, Respondent shall submit progress reports to EPA on a monthly basis, or as otherwise requested by EPA. The reports shall cover all activities that took place during the prior reporting period, including:
 - (a) Describe the actions that have been taken under this SOW;
 - (b) Include all results of sampling and tests and all other data received by Respondent;
 - (c) Describe Work planned for the next two months with schedules relating such Work to the overall project schedule for RI/FS completion;
 - (d) Describe all problems encountered in complying with the requirements of this SOW and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays;

- (e) Describe of any modifications to the work plans or other schedules Respondent has proposed or that have been approved by EPA; and
- (f) Describe all activities undertaken in support of the CIP during the reporting period and those to be undertaken in the next six weeks.
- **6.3 Notice of Schedule Changes.** If the schedule for any activity described in the Progress Reports, including deliverables required under Section 7, changes, Respondent shall notify EPA of such change at least seven days before they perform the activity.
- 6.4 Investigation Derived Waste. Respondent may ship Investigation Derived Waste ("IDW") from the Site to an off-site facility only if they comply with section 121(d)(3) of CERCLA, section 300.440 ("Off-Site Rule") of the NCP, EPA's Guide to Management of Investigation Derived Waste, OSWER 9345.3-03FS (Jan. 1992). Wastes shipped off-site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 C.F.R. § 261.4(e) shipped off-site for treatability studies, are not subject to section 300.440 of the NCP.

6.5 Permits

- (a) As provided in CERCLA § 121(e), and section 300.400(e) of the NCP, no permit is required for any portion of the Work conducted entirely on-site (*i.e.*, within the areal extent of contamination or in very close proximity to the contamination and necessary for implementation of the Work). Where any portion of the Work that is not on-site requires a federal or state permit or approval, Respondent shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals.
- (b) Respondent may seek relief under the provisions of Section XIII (Force Majeure) of the Settlement for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit or approval referenced in ¶ 6.5(a) and required for the Work, provided that they have submitted timely and complete applications and taken all other actions necessary to obtain all such permits or approvals.
- (c) Nothing in the Settlement or this SOW constitutes a permit issued under any federal or state statute or regulation.

6.6 Emergency Response and Reporting

(a) **Emergency Action.** If any event occurs during performance of the Work that causes or threatens to cause a release of hazardous substances, pollutants or contaminants on, at, or from the Site and that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, Respondent shall: (1) immediately take all appropriate action to prevent, abate, or minimize such release or threat of release; (2) immediately notify the authorized EPA officer (as specified in ¶ 6.6(b)) orally; and (3) take such actions in consultation with the authorized EPA officer and in accordance

- with all applicable provisions of the Health and Safety Plan, the Emergency Response Plan, and any other deliverable approved by EPA under the SOW.
- (b) Release Reporting. Upon the occurrence of any event during performance of the RI Work that Respondent is required to report pursuant to sections 103 and 111(g) of CERCLA, or section 304 of EPCRA, Respondent shall immediately notify the authorized EPA officer orally.
- (c) The "authorized EPA officer" for purposes of immediate oral notifications and consultations is the EPA Project Coordinator, the EPA Alternate Project Coordinator (if the EPA Project Coordinator is unavailable), or the EPA Region 3 Hotline at (215) 814-3255 (if neither EPA Project Coordinator is available).
- (d) For any event covered by ¶ 6.6, Respondent shall: (1) within 14 days after the onset of such event, submit a report to EPA describing the actions or events that occurred and the measures taken, and to be taken, in response thereto; and (2) within 30 days after the conclusion of such event, submit a report to EPA describing all actions taken in response to such event.
- (e) The reporting requirements under ¶ 6.6 are in addition to the reporting required by CERCLA §§ 103 and 111(g) or EPCRA § 304.

7. **DELIVERABLES**

7.1 General Requirements for Deliverables

- (a) Respondent shall submit deliverables for EPA approval or for EPA comment as specified in the SOW. If neither is specified, the deliverable does not require EPA's approval or comment. Paragraph 7.3 (Data Format Specifications) applies to all deliverables. Paragraph 7.4 (Certification) applies to any deliverable that is required to be certified. Paragraph 7.5 (Approval of Deliverables) applies to any deliverable that is required to be submitted for EPA approval. All deliverables shall be submitted by the deadlines in the RI/FS Schedule in ¶ 9.1.
- (b) Respondent shall submit all deliverables in electronic form. Data format specifications for sampling, analytical and monitoring data, and spatial data are addressed in ¶ 7.3. All other deliverables shall be submitted in the electronic form specified by EPA's Project Coordinator. Respondent shall not submit deliverables to EPA that are marked as "copyright," "trademark," or confidential," as the deliverables are part of the administrative record for the Site and as such are available to the public.
- **7.2 Commonwealth Copies.** Respondent shall, at any time they send a deliverable to EPA, send a copy to the Commonwealth. EPA shall, at any time it sends a notice, authorization, approval, disapproval, or certification to Respondent, send a copy to the Commonwealth.

7.3 Data Format Specifications

- (a) Sampling, analytical and monitoring data shall be submitted in standard regional Electronic Data Deliverable format. The Settling Defendants should follow guidance outlined in the EPA Region 3 website

 https://www.epa.gov/superfund/region-3-superfund-electronic-data-submission.

 At a minimum, all electronic data deliverables are to be submitted to EPA, and made available to the State upon request, in the Staged Electronic Data Deliverable (SEDD) 2a, 2b or SEDD 3 format. The Settling Defendants are responsible for ensuring the laboratory can generate a compliant SEDD file.

 Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes.
- (b) Spatial data, including spatially-referenced data and geospatial data, shall be submitted: (1) in the ESRI File Geodatabase format; (2) in the .KMZ/.KML file format; and (3) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. If applicable, submissions shall include the collection method(s). Projected coordinates may optionally be included but shall be documented. Spatial data shall be accompanied by metadata, and such metadata shall be compliant with the Federal Geographic Data Committee ("FGDC") Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor complies with these FGDC and EPA metadata requirements and is available at https://www.epa.gov/geospatial/epa-metadata-editor.
- (c) Each file shall include an attribute name for each site unit or sub-unit submitted. Consult https://www.epa.gov/geospatial/geospatial-policies-and-standards for any further available guidance on attribute identification and naming.
- (d) Spatial data submitted by Respondent does not, and is not intended to, define the boundaries of the Site.
- **7.4 Certification**. All deliverables that require compliance with this Section must be signed (which may include electronically signed) by Respondent's Project Coordinator, or other responsible official of Respondent, and shall contain the following statement:

I certify under penalty of perjury that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

7.5 Approval of Deliverables

(a) Initial Submissions

- (1) After review of any deliverable that is required to be submitted for EPA approval under this SOW, EPA shall: (i) approve, in whole or in part, the submission; (ii) approve the submission upon specified conditions; (iii) disapprove, in whole or in part, the submission; or (iv) any combination of the foregoing.
- (2) EPA also may modify the initial submission to cure deficiencies in the submission if: (i) EPA determines that disapproving the submission and awaiting a resubmission would cause substantial disruption to the Work; or (ii) previous submission(s) have been disapproved due to material defects and the deficiencies in the initial submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.
- (b) **Resubmissions**. Upon receipt of a notice of disapproval under ¶ 7.5(a) (Initial Submissions), or if required by a notice of approval upon specified conditions under ¶ 7.5(a), Respondent shall, within 30 days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the deliverable for approval. After review of the resubmitted deliverable, EPA may: (1) approve, in whole or in part, the resubmission; (2) approve the resubmission upon specified conditions; (3) modify the resubmission; (4) disapprove, in whole or in part, the resubmission, requiring Respondent to correct the deficiencies; or (5) any combination of the foregoing.
- (c) **Implementation**. Upon approval, approval upon conditions, or modification by EPA under ¶ 7.5(a) (Initial Submissions) or ¶ 7.5(b) (Resubmissions), of any deliverable, or any portion thereof: (1) such deliverable, or portion thereof, will be incorporated into and enforceable under the Settlement; and (2) Respondent shall take any action required by such deliverable, or portion thereof. The implementation of any non-deficient portion of a deliverable submitted or resubmitted under ¶ 7.5(a) or ¶ 7.5(b) does not relieve Respondent of any liability for stipulated penalties under Section XV (Stipulated Penalties) of the Settlement.
- (d) Notwithstanding the receipt of a notice of disapproval, Respondent shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA.
- (e) In the event that EPA takes over some of the tasks, Respondent shall incorporate and integrate information supplied by EPA into those reports.
- (f) Respondent shall not proceed with any activities or tasks dependent on the following deliverables until receiving EPA approval, approval on condition, or modification of such deliverables: RI/FS Work Plan; Sampling and Analysis Plan; draft RI Report; Treatability Testing Work Plan; Treatability Testing Sampling and Analysis Plan; Treatability Testing Health and Safety Plan; and draft FS

- Report. While awaiting EPA approval, approval on condition, or modification of these deliverables, Respondent shall proceed with all other tasks and activities that may be conducted independently of these deliverables, in accordance with the schedule set forth under this Settlement.
- (g) For all remaining deliverables not listed in ¶ 7.5(f), Respondent shall proceed with all subsequent tasks, activities, and deliverables without awaiting EPA approval of the submitted deliverable. EPA reserves the right to stop Respondent from proceeding further, either temporarily or permanently, on any task, activity, or deliverable at any point during the Work.
- (h) **Material Defects**. If an initially submitted or resubmitted plan, report, or other deliverable contains a material defect, and the plan, report, or other deliverable is disapproved or modified by EPA under ¶ 7.5(a) (Initial Submissions) or (b) (Resubmissions) due to such material defect, Respondent shall be deemed in violation of this Settlement for failure to submit such plan, report, or other deliverable timely and adequately. Respondent may be subject to penalties for such violation as provided in Section XV (Stipulated Penalties) of the Settlement.
- **7.6 Commonwealth Review and Comment.** The Commonwealth will have a reasonable opportunity for review and comment prior to any EPA approval or disapproval under ¶ 7.5 of any deliverables that are required to be submitted for EPA approval.
- Notice of Completion of RI/FS Work. When EPA determines that all RI/FS Work has been fully performed in accordance with this Settlement, with the exception of any continuing obligations required by this Settlement, including, e.g., payment of Future Response Costs, if applicable: land, water, or other resource use restrictions, and Record Retention, EPA will provide written notice to Respondent. If EPA determines that any Work has not been completed in accordance with this Settlement, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the RI/FS Work Plan, if appropriate, in order to correct such deficiencies. Respondent shall implement the modified and approved RI Work Plan and shall submit a modified draft RI Report and/or FS Report in accordance with the EPA notice. Failure by Respondent to implement the approved modified RI/FS Work Plan shall be a violation of this Settlement.

8. ADDITIONAL INVESTIGATION AND ANALYSIS

- 8.1 If EPA determines there is a need for additional data, Respondent shall submit a memorandum documenting the need for additional data to the RPM within 10 days of identification. EPA, in its discretion, will determine whether the additional data will be collected by Respondent and whether it will be incorporated into plans, reports, and other deliverables.
- 8.2 If EPA determines that additional Work on any of the Sites is required to meet the objectives of this Settlement Agreement and that Work is not covered by Section 7 above, the RPM may notify Respondent in writing of such determination and specify any

proposed changes to the SOW and any Deliverable to reflect the additional Work. Subject to its rights pursuant to Section XIV of the Settlement to invoke Dispute Resolution, Respondent agrees to conduct this additional Work pursuant to this Settlement Agreement. Within ten (10) working days of receipt of the written determination that additional Work is required, Respondent shall confirm its willingness to perform the additional Work by providing notification to the RPM or invoke Dispute Resolution. The SOW and/or RI/FS Work Plan shall be modified to incorporate the additional Work, or in accordance with the final resolution of the dispute. EPA reserves the right to seek any appropriate relief, including the right to conduct the Work itself at any point, and to require reimbursement from Respondent, as provided in Paragraph 32 ("Work Takeover") of the Settlement.

8.3 If prior to the completion of Work required by a Work Plan, EPA determines that sufficient data has been collected with respect to a particular portion of any of the Sites or an issue pertaining to one of the Sites, then the RPM may communicate a decision to accelerate the RI Report and FS process or undertake a removal or remedial action with respect to that particular portion or issue. EPA's selection to undertake this approach may result in one or more EE/CAs and one or more FSs at a Site, the combination of which will address all pathways for the release or threatened release of hazardous substances at the particular Site. Respondent will complete the initial FS on the schedule provided in the SOW. Respondent will complete the EE/CAs or subsequent FSs described on a schedule proposed by Respondent in a revised FS or draft EE/CA Work Plan and approved by EPA.

9. SCHEDULE

9.1 All deliverables and tasks required under this SOW shall be submitted or completed by the deadlines or within the time durations listed in the RI/FS schedule set forth below. Respondent may submit proposed revised RI/FS schedules for EPA approval. Upon EPA's approval, the revised RI/FS schedule supersedes any prior RI/FS schedule.

Description	Reference	Deadline
Designate CI Coordinator	¶ 2.2(c)	Within 30 days after EPA request
Technical Assistance Plan	¶ 2.4	Within 30 days after EPA request
Previous Investigation Report	¶ 4.1	Within 30 days after Effective Date
Conceptual Site Model Report	¶ 4.2	Within 30 days after Effective Date
Kickoff Meeting	¶ 6.1(a)	Within 30 days after EPA's receipt of the
		Previous Investigation Report (¶ 4.1) and CSM
		(¶ 4.2)
Remedial Investigation Work	¶ 4.3(a)	Within 60 days after Kickoff Meeting
Plan		
Identification of Candidate	¶ 4.5(a)	Within 30 days after EPA request
Treatment Technologies		_
Memorandum		

Treatability Test Work Plan	¶ 4.5(b)	30 days after EPA approval of Identification of Candidate Treatment Technologies Memorandum (¶ 4.5(a))
Treatability Study Evaluation Report	¶ 4.5(c)	30 days after the completion of the Treatability Test Work Plan (¶4.5(b))
Refine RAOs and ARARs	¶ 5.2(a)	Within 30 days after EPA request
Identify and Evaluate Remedial Technologies	¶ 5.2(b)	Within 30 days after EPA request and concurrent with Refine RAOs and ARARs (¶ 5.2(a))
Comparative Analysis of Alternatives	¶ 5.2(c)	30 days after EPA approval of Refine RAOs and ARARs (¶ 5.2(a)) and Identify and Evaluate Remedial Technologies (¶ 5.2(b))
Community Concerns about Impacts	¶ 5.2(d)	30 days after EPA approval of Comparative Analysis of Alternatives (¶ 5.2(c))
Refine IC Evaluation	¶ 5.2(e)	30 days after EPA approval of Comparative Analysis of Alternatives (¶ 5.2(c)) and concurrent with Community Concerns about Impacts (¶ 5.2(d))
Draft FS Report	¶ 5.2(f)	30 days after EPA approval of Community Concerns about Impacts (¶ 5.2(d)) and Refine IC Evaluation (¶ 5.2(e))

10. REFERENCES

- 10.1 The following regulations and guidance documents, among others, apply to the Work. Any item for which a specific URL is not provided below is available on one of the two EPA web pages listed in ¶ 10.2:
 - (a) A Compendium of Superfund Field Operations Methods, OSWER 9355.014, EPA/540/P-87/001a (Aug. 1987).
 - (b) CERCLA Compliance with Other Laws Manual, Part I: Interim Final, OSWER 9234.1-01, EPA/540/G-89/006 (Aug. 1988).
 - (c) Guidance for Conducting Remedial Investigations and Feasibility Studies, OSWER 9355.3-01, EPA/540/G-89/004 (Oct. 1988).
 - (d) CERCLA Compliance with Other Laws Manual, Part II, OSWER 9234.1-02, EPA/540/G-89/009 (Aug. 1989).
 - (e) Guide to Management of Investigation-Derived Wastes, OSWER 9345.303FS (Jan. 1992).

- (f) Permits and Permit Equivalency Processes for CERCLA On-Site Response Actions, OSWER 9355.703 (Feb. 1992).
- (g) Guidance for Conducting Treatability Studies under CERCLA, OSWER 9380.3-10, EPA/540/R-92/071A (Nov. 1992).
- (h) National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule, 40 C.F.R. part 300 (Oct. 1994).
- (i) EPA Guidance for Data Quality Assessment, Practical Methods for Data Analysis, QA/G-9, EPA/600/R-96/084 (July 2000).
- (j) Guidance for Quality Assurance Project Plans, QA/G-5, EPA/240/R-02/009 (Dec. 2002).
- (k) Institutional Controls: Third Party Beneficiary Rights in Proprietary Controls (Apr. 2004).
- (l) Quality management systems for environmental information and technology programs -- Requirements with guidance for use, ASQ/ANSI E4:2014 (American Society for Quality, Feb. 2014).
- (m) Uniform Federal Policy for Quality Assurance Project Plans, Parts 1-3, EPA/505/B-04/900A though 900C (Mar. 2005).
- (n) Superfund Community Involvement Handbook, OLEM 9230.0-51 (Mar. 2020). More information on Superfund community involvement is available on the Agency's Superfund Community Involvement Tools and Resources web page at https://www.epa.gov/superfund/community-involvement-tools-and-resources.
- (o) EPA Guidance on Systematic Planning Using the Data Quality Objectives Process, QA/G-4, EPA/240/B-06/001 (Feb. 2006).
- (p) EPA Requirements for Quality Assurance Project Plans, QA/R-5, EPA/240/B-01/003 (Mar. 2001, reissued May 2006).
- (q) EPA Requirements for Quality Management Plans, QA/R-2, EPA/240/B-01/002 (Mar. 2001, reissued May 2006).
- (r) EPA Directive CIO 2105.1 (Environmental Information Quality Policy (Mar. 31, 2021), https://www.epa.gov/system/files/documents/2023-04/environmental information quality policy.pdf.
- (s) USEPA Contract Laboratory Program Statement of Work for Organic Superfund Methods (Multi-Media, Multi-Concentration), SOM02.4 (Oct. 2016).
- (t) EPA National Geospatial Data Policy, CIO Policy Transmittal 05-002 (Aug. 2008), https://www.epa.gov/geospatial/geospatial-policies-and-standards

- and https://www.epa.gov/sites/default/files/2014-08/documents/national geospatial data policy 0.pdf.
- (u) Summary of Key Existing EPA CERCLA Policies for Groundwater Restoration, OSWER 9283.1-33 (June 2009).
- (v) Principles for Greener Cleanups (Aug. 28, 2009), https://www.epa.gov/greenercleanups/epa-principles-greener-cleanups.
- (w) Consideration of Greener Cleanup Activities in the Superfund Cleanup Process (Aug. 2, 2016), https://semspub.epa.gov/work/HQ/100000160.pdf.
- (x) Providing Communities with Opportunities for Independent Technical Assistance in Superfund Settlements, Interim (Sept. 2009).
- (y) Close Out Procedures for National Priorities List Superfund Sites, OSWER 9320.2-22 (May 2011), https://www.epa.gov/superfund/close-out-procedures-national-priorities-list-superfund-sites.
- (z) Groundwater Road Map: Recommended Process for Restoring Contaminated Groundwater at Superfund Sites, OSWER 9283.1-34 (July 2011).
- (aa) Recommended Evaluation of Institutional Controls: Supplement to the "Comprehensive Five-Year Review Guidance," OSWER 9355.7-18 (Sept. 2011).
- (bb) Updated Superfund Response and Settlement Approach for Sites Using the Superfund Alternative Approach, OSWER 9200.2125 (Sept. 2012).
- (cc) Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites, OSWER 9355.0-89, EPA/540/R-09/001 (Dec. 2012).
- (dd) Institutional Controls: A Guide to Preparing Institutional Controls Implementation and Assurance Plans at Contaminated Sites, OSWER 9200.0-77, EPA/540/R-09/02 (Dec. 2012).
- (ee) EPA's Emergency Responder Health and Safety Manual, OSWER 9285.3-12 (July 2005 and updates), https://www.epaosc.org/_HealthSafetyManual/manual-index.htm.
- (ff) Guidance on Systematic Planning Using the Data Quality Objectives Process, EPA QA/G-4, EPA/240/B-06/001, Office of Environmental Information (Feb. 2006), https://www.epa.gov/sites/production/files/2015-06/documents/g4-final.pdf.
- (gg) Consideration of Tribal Treaty Rights and Traditional Ecological Knowledge in the Superfund Remedial Program, OLEM 9200.2-177 (Jan. 2017), https://semspub.epa.gov/src/document/11/500024668.

- (hh) Smart Scoping for Environmental Investigation Technical Guide, EPA/542/G-18/004 (Nov. 2018), https://semspub.epa.gov/work/HQ/100001799.pdf.
- (ii) Strategic Sampling Approaches Technical Guide, EPA/542/-F-18/005 (Nov. 2018), https://semspub.epa.gov/work/HQ/100001800.pdf.
- (jj) Best Practices for Data Management, EPA/542/F-18/003, (Nov. 2018), https://semspub.epa.gov/work/HQ/100001798.pdf.
- (kk) Smart Scoping of an EPA-Lead Remedial Investigation/Feasibility Study, EPA/542/F-19/0006 (Oct. 2020), https://semspub.epa.gov/work/HQ/100002571.pdf.
- (ll) Interim Final Risk Assessment Guidance for Superfund, Volume I Human Health Evaluation Manual (Part A), RAGS, EPA/540/1-89/002, OSWER 9285.7-01A (Dec. 1989), https://www.epa.gov/risk/risk-assessment-guidance-superfund-rags-part.
- (mm) Interim Final Risk Assessment Guidance for Superfund, Volume I Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments), OSWER 9285.7-47 (Dec. 2001), https://www.epa.gov/risk/risk-assessment-guidance-superfund-rags-part-d.
- (nn) Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments, ("ERAGS"), EPA/540/R-97/006, OSWER 9285.7-25 (June 1997).
- (oo) Reuse Assessments: A Tool to Implement the Superfund Land Use Directive. OSWER 9355.7-06P (June 4, 2001), https://semspub.epa.gov/work/HQ/175564.pdf.
- (pp) ECO Update: The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments, EPA/540/F-01/014 (June 2001).
- (qq) EPA QA Field Activities Procedure CIO 2105-P-02.1 (Sept. 23, 2014)
- (rr) EPA Requirements for Quality Management Plans (QA/R-2) EPA/240/B-01/002 (Mar. 2001, reissued May 2006).
- (ss) Summary of Key Existing EPA CERCLA Policies for Groundwater Restoration, OSWER 9283.1-33 (June 2009).
- (tt) Considering Reasonably Anticipated Future Land Use and Reducing Barriers to Reuse at EPA-lead Superfund Remedial Sites. OSWER 9355.7-19 (Mar. 2010).
- 10.2 A more complete list may be found on the following EPA web pages:

- (a) Superfund Laws, Policy, and Guidance: https://www.epa.gov/superfund/superfund-policy-guidance-and-laws.
- (b) Collection of Methods: https://www.epa.gov/measurements/collection-methods.
- (c) Quality Assurance:
 - (1) EPA QA Field Activities Procedures: https://www.epa.gov/irmpoli8/epa-qa-field-activities-procedures.
 - (2) Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency-Funded Acquisitions:

 https://www.epa.gov/sites/default/files/2016-11/documents/fem-lab-competency-policy_policy_updated_nov2016.pdf.
 - (3) Superfund Contract Laboratory Program: https://www.epa.gov/clp.
 - (4) Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (SW-846), Second edition (July 1982): https://www.epa.gov/hw-sw846.
 - (5) Standard Methods for the Examination of Water and Wastewater: http://www.standardmethods.org/.
 - (6) Air Toxics Monitoring Methods: https://www3.epa.gov/ttnamti1/airtox.html.
- (d) Superfund Redevelopment Basics: Policy, Guidance, and Resources: https://www.epa.gov/superfund-redevelopment-initiative/superfund-redevelopment-basics#policy.
- (e) Superfund Green Remediation: https://www.epa.gov/superfund/superfund-green-remediation.
- (f) Ecological Risk Assessment: https://www.epa.gov/risk/ecological-risk-assessment.
- 10.3 For any regulation or guidance referenced in the Settlement or SOW, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after Respondent receive notification from EPA of the modification, amendment, or replacement.

APPENDIX CList of Stipulated Penalties

Stipulated Penalties

Stipulated penalties shall accrue pursuant to ¶ 64.a(iv) of this Settlement for any failure to:

- 1. Timely seek approval of the form of financial assurance and submit the assurance to EPA as required by ¶ 44 of this Settlement;
- 2. Timely notify EPA of the inadequacy of the financial assurance, timely submit a revised proposal for financial assurance, and timely submit the revised financial assurance to EPA as required by ¶ 45 of this Settlement;
 - 3. Timely pay the amount demanded by EPA pursuant to ¶ 46.c of this Settlement;
- 4. Timely submit documentation of changes to the form, terms, or amount of financial assurance pursuant to ¶ 47 of this Settlement.
- 5. Timely secure insurance, and timely submit insurance certificates and policies pursuant to ¶ 51 of this Settlement;
 - 6. Timely pay Future Response Cost bills pursuant to ¶ 52 of this Settlement;
- 7. Timely provide notices required by ¶ 55 of this Settlement (regarding notices of delays);
- 8. Timely pay stipulated penalties and interest as required under ¶ 66 of this Settlement;
- 9. Timely notify EPA of the designated CI Coordinator as required by Section 2.2(c) of the SOW;
- 10. Timely submit a proposed TAP and quarterly progress reports regarding implementation of the TAP as required by Section 2.4(c) of the SOW;
- 11. Timely designate and notify EPA of the name[s], title[s], contact information, and qualifications of the Respondent's proposed Project Coordinator and Supervising Contractor as required by Section 3.1(b) of the SOW;
- 12. Timely submit a list of supplemental proposed Project Coordinators and/or Supervising Contractors and select approved ones as required by Section 3.1(e) of the SOW;
 - 13. Timely submit reports required by Section 4 of the SOW;

- 14. Timely submit Progress Reports and notices as required by Section 6.2 of the SOW;
 - 15. Timely submit resubmissions as required by Section 7.5(b) of the SOW; and
 - 16. Timely comply with the schedules set forth in Section 9.1 of the SOW.

APPENDIX D Notice Provisions for Stipulated Penalties

Notice Provisions for Stipulated Penalties

For each payment of stipulated penalties made under this Settlement, Respondent shall send notice of payment to:

- (i) EPA in accordance with \P 67;
- (ii) EPA via email to the U.S. EPA Cincinnati Finance Office at CINWD AcctsReceivable@epa.gov;
- (iii) EPA via email to the U.S. EPA Regional Hearing Clerk at R3 Hearing Clerk@epa.gov;

Each such notice shall state:

- (i) the Respondent's name;
- (ii) the Respondent's street/P.O. Box address;
- (iii) the Respondent's email address;
- (iv) the Respondent's telephone number;
- (v) the name of the case;
- (vi) the docket number of the case;
- (viii) the amount of the payment; and
- (ix) the method of payment.